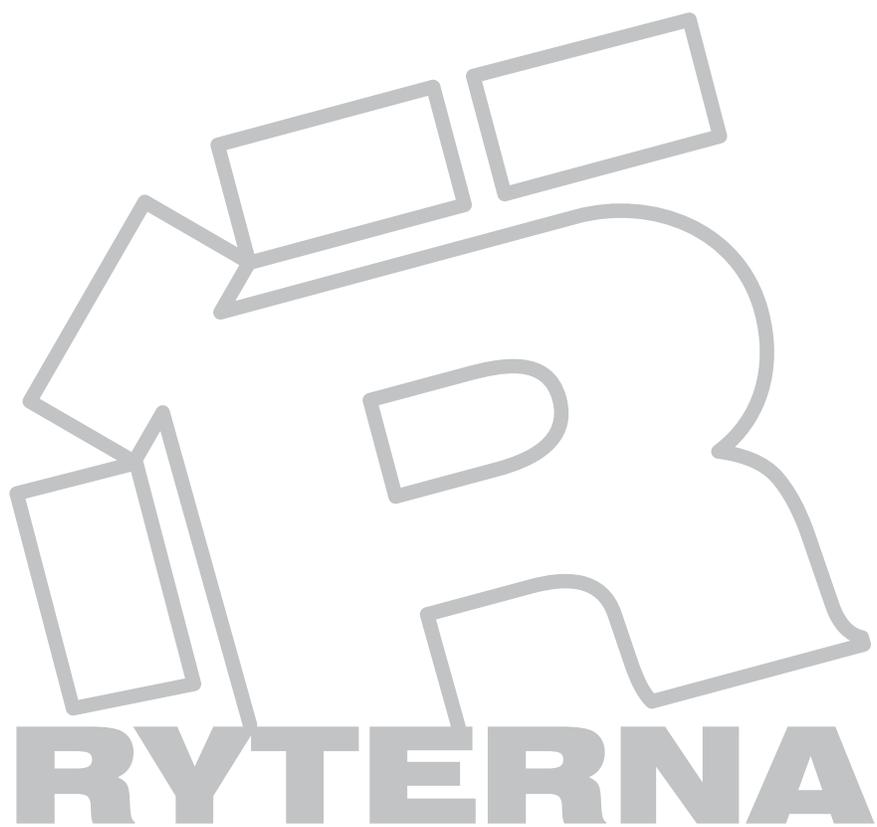




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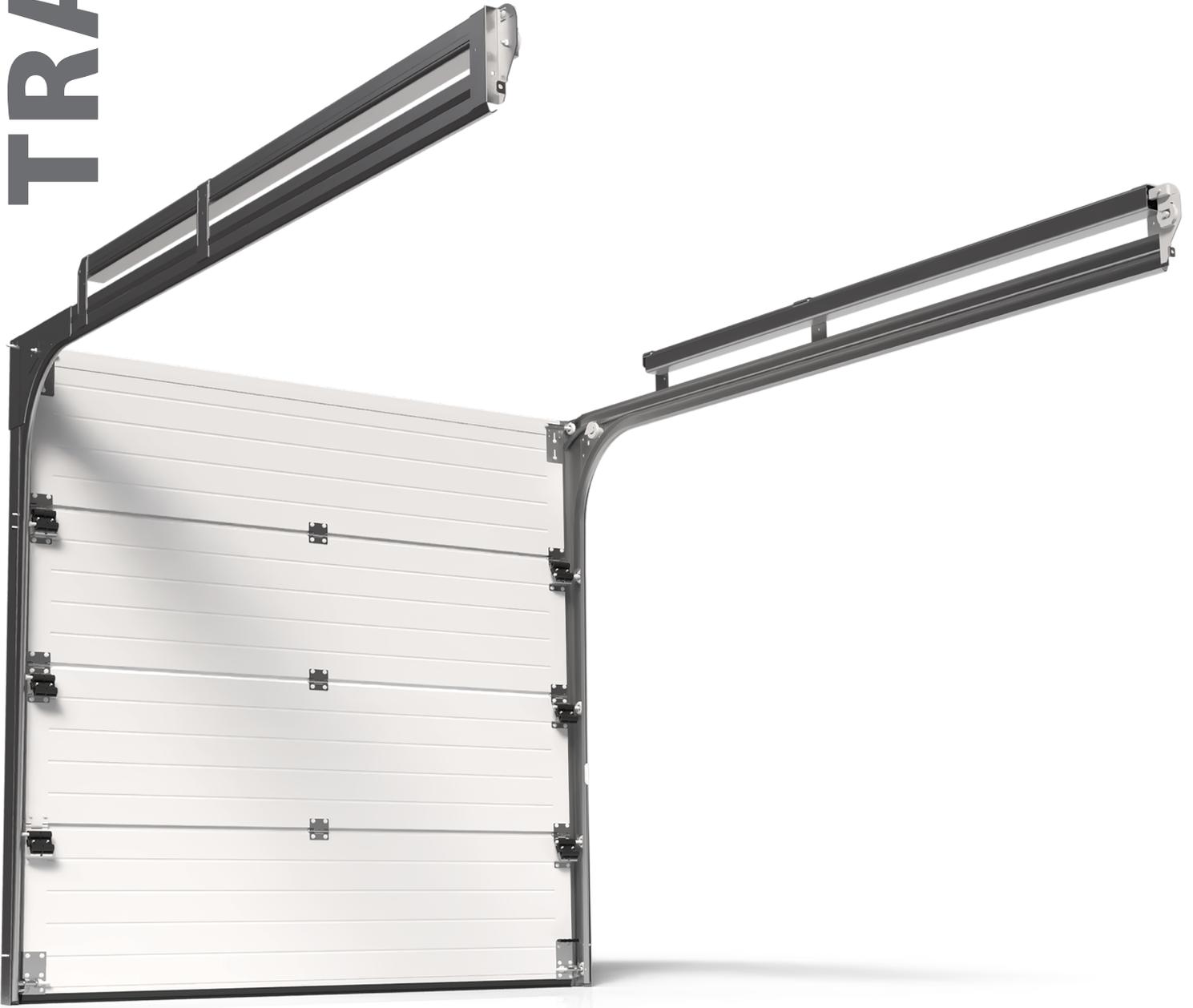
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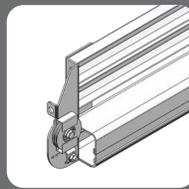


05	R30 - UM
06	R40 - SM
07	R40 - UM
08	R40 - TM
09	R60 - SM
10	R60 - UM
11	R60 - TM
12	TL40 LHR - FM
13	TL40 LHR - RM
14	TL40 STD
15	TL60 LHR - FM
16	TL60 LHR - RM
17	TL60 STD
18	OPTIONS TO REDUCE HEADROOM AND INCREASE DAYLIGHT OPENING
19	TL40 LHR - FM PR
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22	DOOR SIZE, PITCH ANGLE AND REQUIRED HEADROOM CORRELATION
23	SIDE SLIDING SECTIONAL DOORS SSD
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41	WICKET DOORS
45	SIDE HINGED DOORS SH1
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51	ALUMINUM INSULATED DOORS SH2 THERMO

CONTENTS

TRACKS





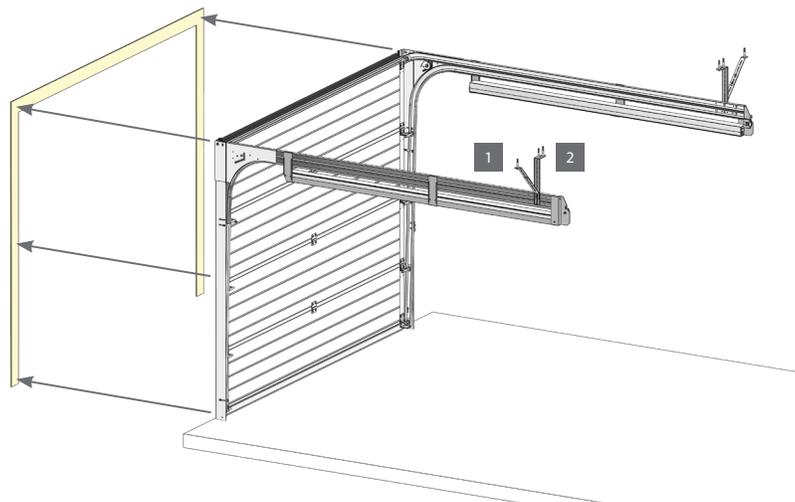
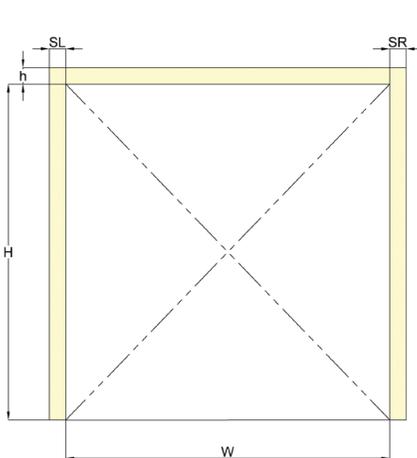
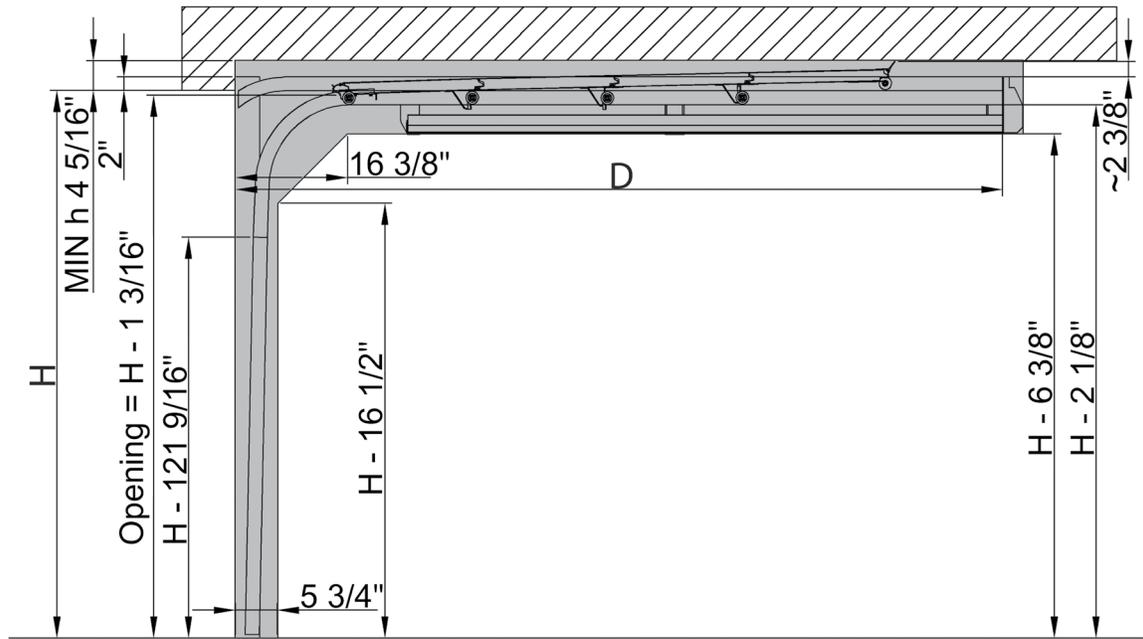
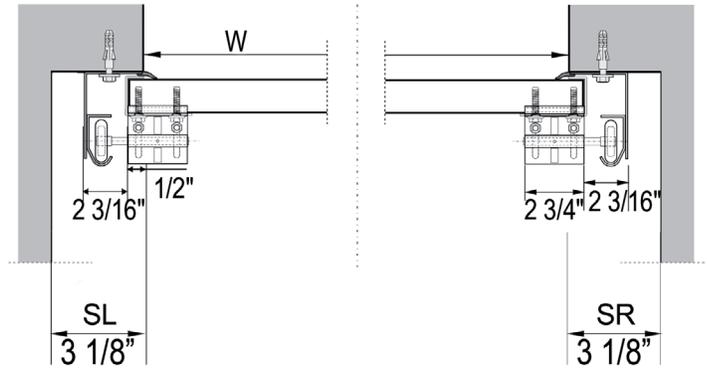
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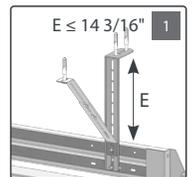
h (headroom)	4 5/16" (manual) 5 7/8" (with el. operator)
SL / SR (sideroom)	3 1/8"
Daylight opening	H - 1 3/16" (with el. operator)

H	D
≤ 81 1/2"	105 1/2"
81 9/16" - 83 5/8"	113 3/8"
96 1/2" - 98 7/16"	118 5/16"

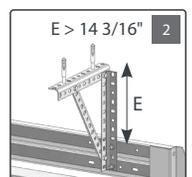
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side

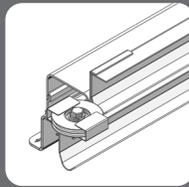


STANDARD



OPTIONAL

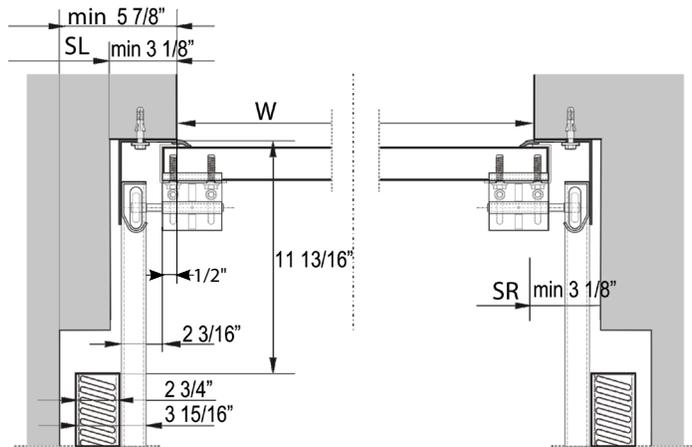




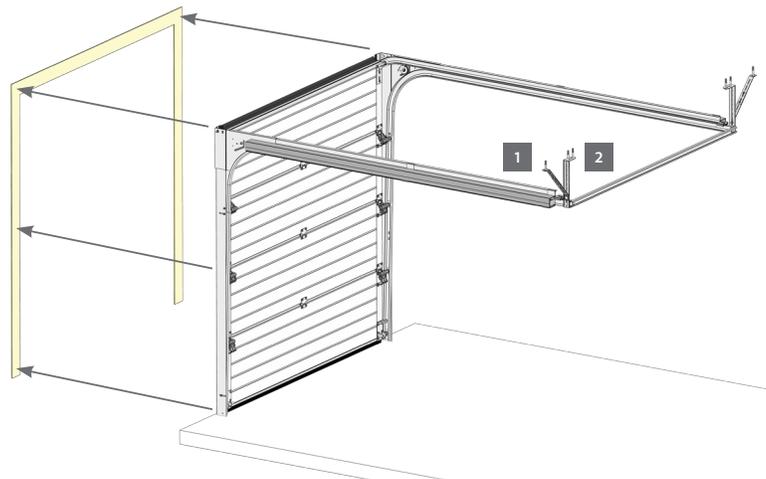
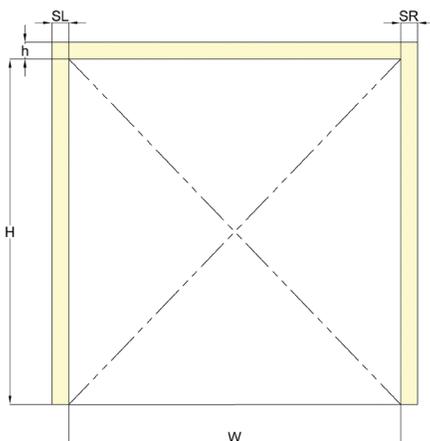
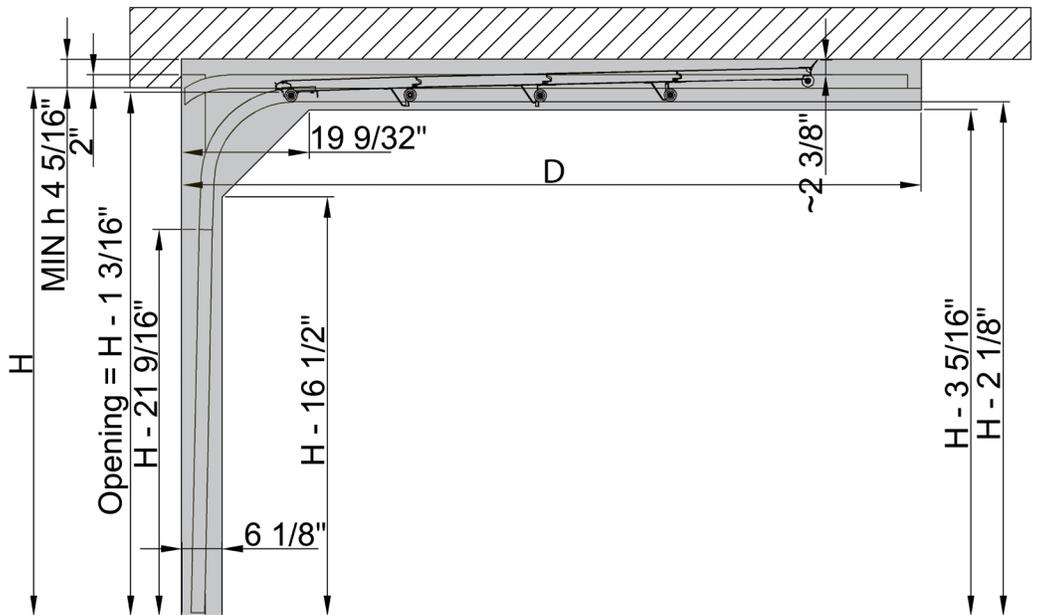
h (headroom)	4 5/16" (manual) 5 7/8" (with el. operator)
SL / SR (sideroom)	5 7/8"
Daylight opening	H - 1 3/16" (with el. operator)

H	D
≤ 81 1/2"	107 1/16"
81 9/16" - 89 3/8"	115"
89 7/16" - 94 1/2"	119 15/16"
94 1/2" - 98 7/16"	129 15/16"

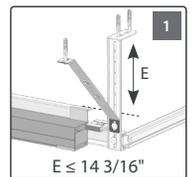
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



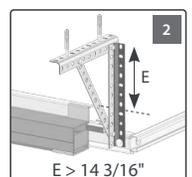
See page 18 for options to reduce required headroom and increase daylight opening.

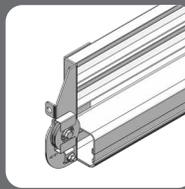


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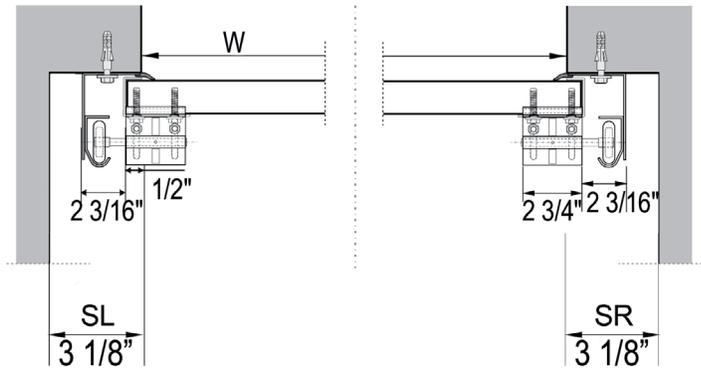
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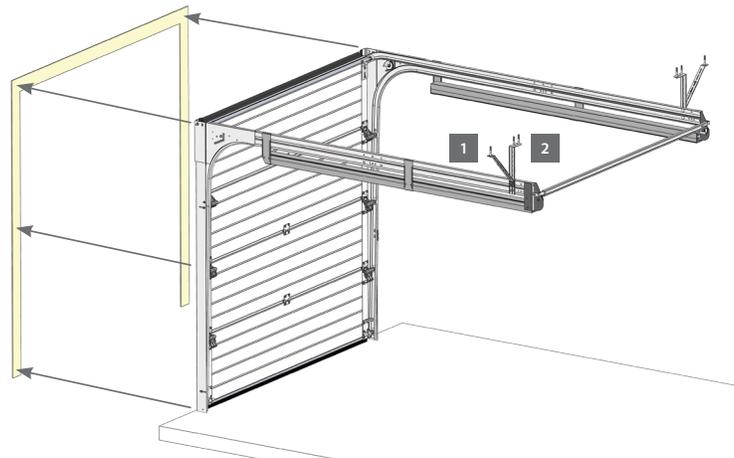
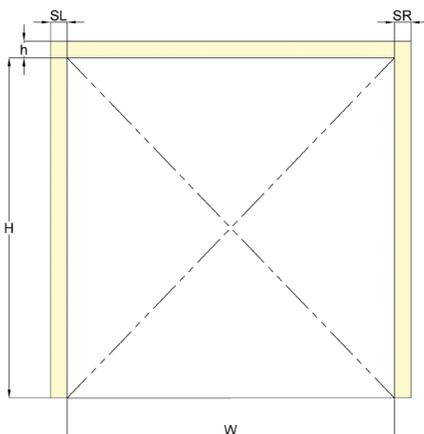
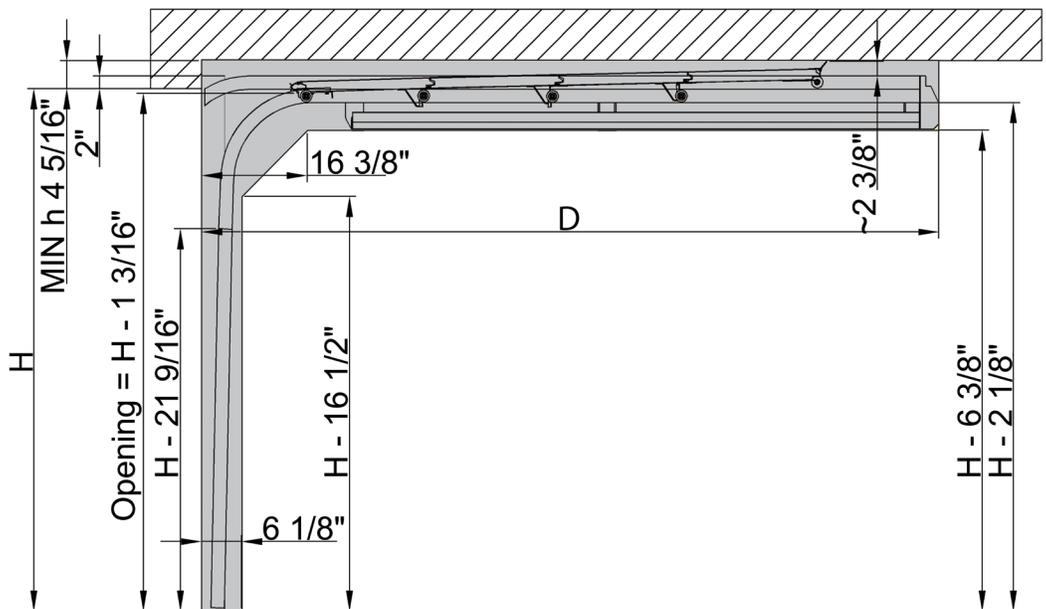
h (headroom)	4 5/16" (manual) 5 7/8" (with el. operator)
SL / SR (sideroom)	3 1/8"
Daylight opening	H - 1 3/16" (with el. operator)

H	D
≤ 81 1/2"	105 1/2"
81 9/16" - 89 3/8"	113 3/8"
89 7/16" - 94 1/2"	118 5/16"
94 1/2" - 98 7/16"	128 5/16"

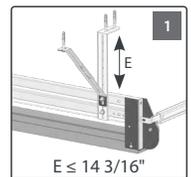
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



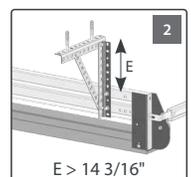
See page 18 for options to reduce required headroom and increase daylight opening.

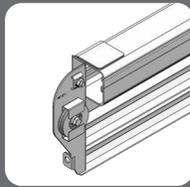


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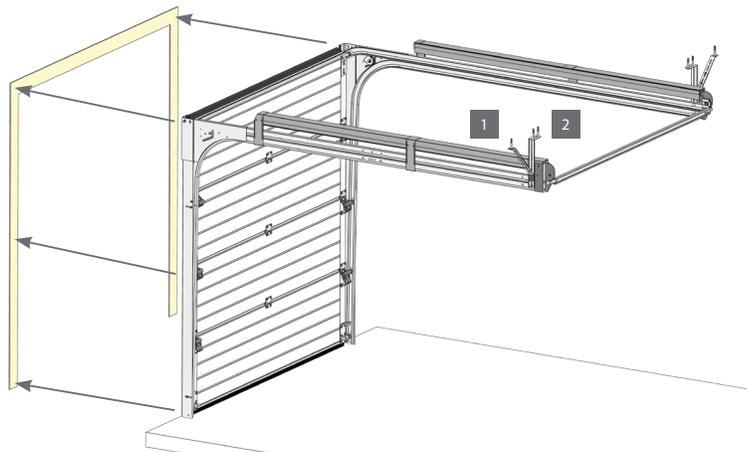
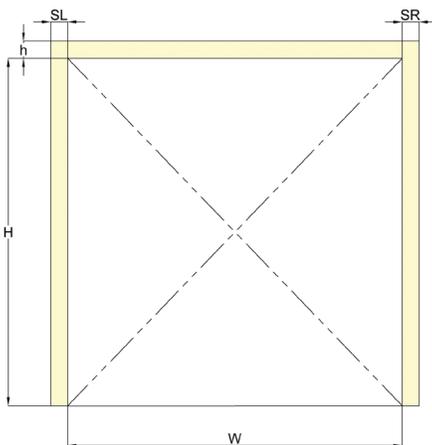
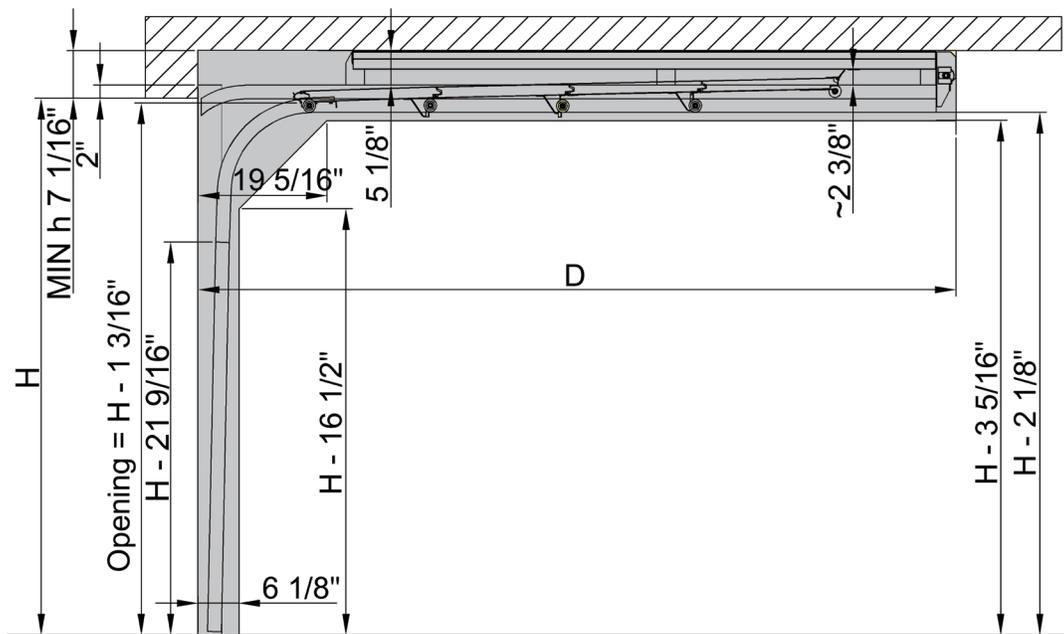
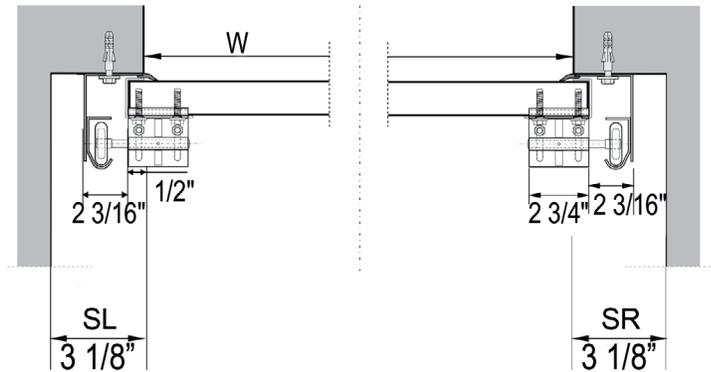




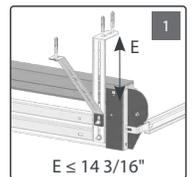
h (headroom)	7 1/16" (with el. operator or manual)
SL / SR (sideroom)	3 1/8"
Daylight opening	H - 1 3/16" (with el. operator)

H	D
≤ 83 5/8"	113 3/8"
83 11/16" - 88 9/16"	118 5/16"
88 11/16" - 98 7/16"	128 5/16"

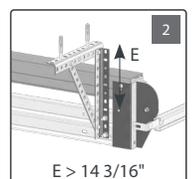
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side

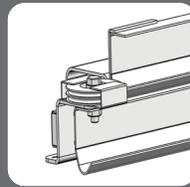


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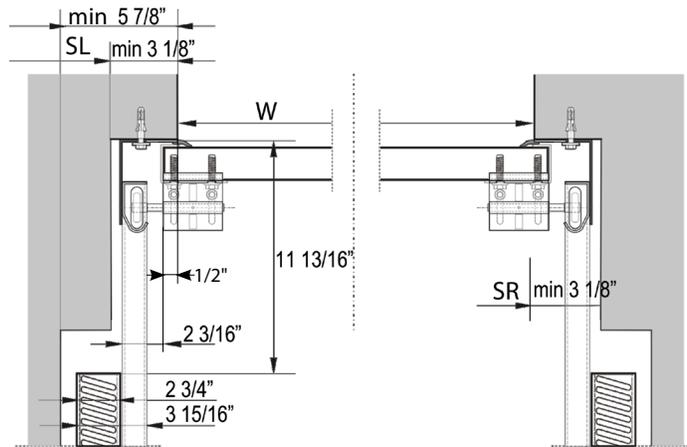
R60 - SM



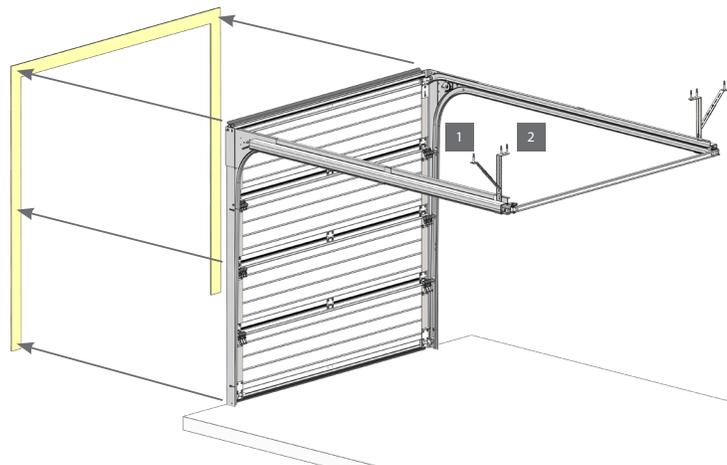
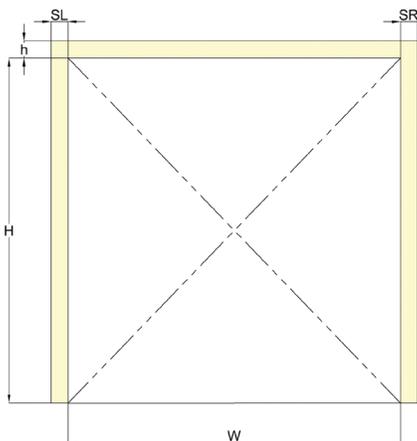
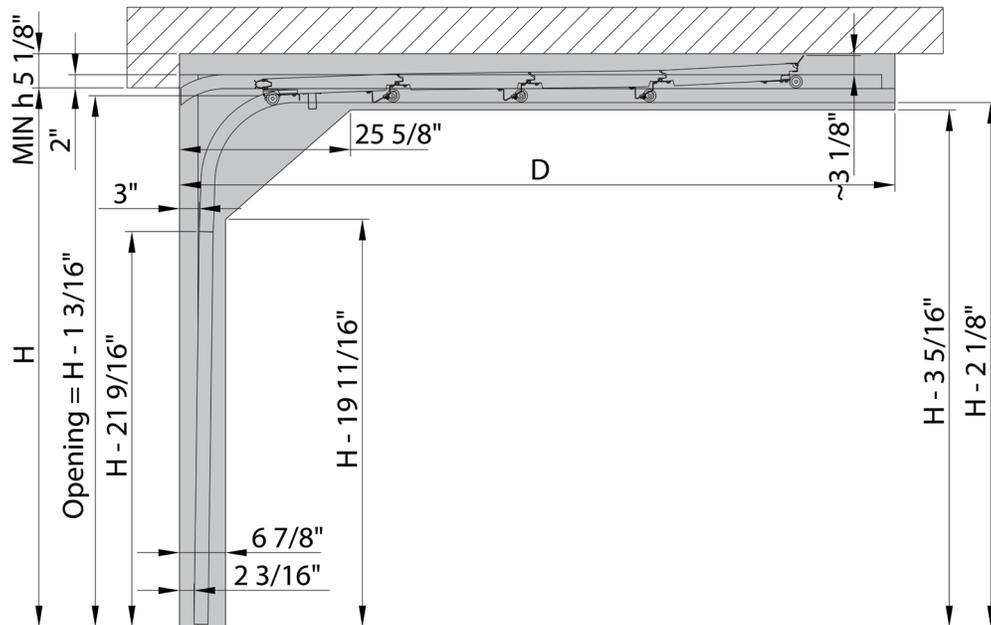
h (headroom)	5 1/8" (manual) 6 11/16" (with el. operator)
SL / SR (sideroom)	3 1/8"
Daylight opening	H - 1 3/16" (with el. operator)

H	D
≤ 81 1/2"	107 1/16"
81 9/16" - 89 3/8"	115"
89 7/16" - 94 1/2"	119 15/16"
94 1/2" - 98 7/16"	129 15/16"

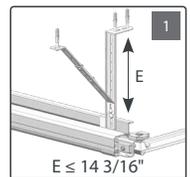
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



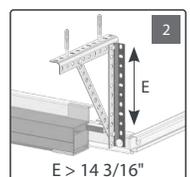
See page 18 for options to reduce required headroom and increase daylight opening.

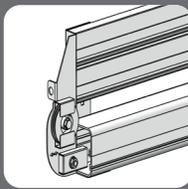


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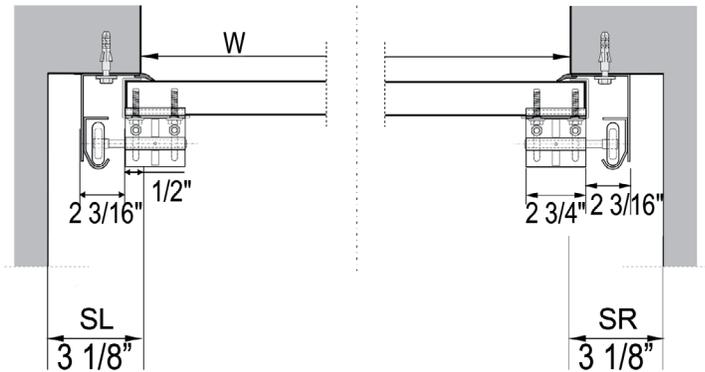




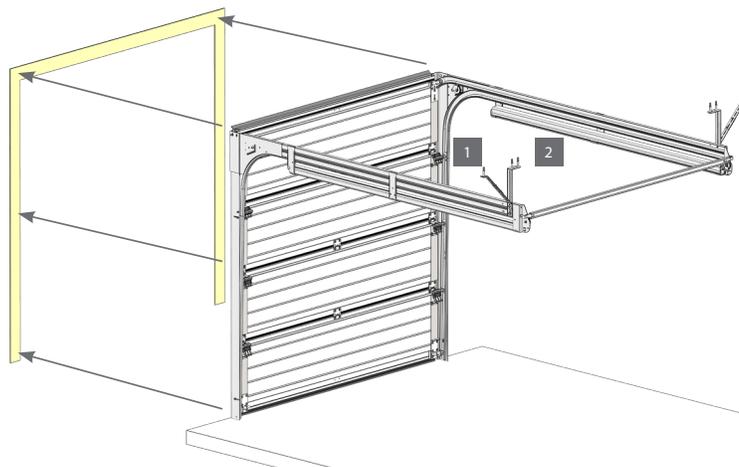
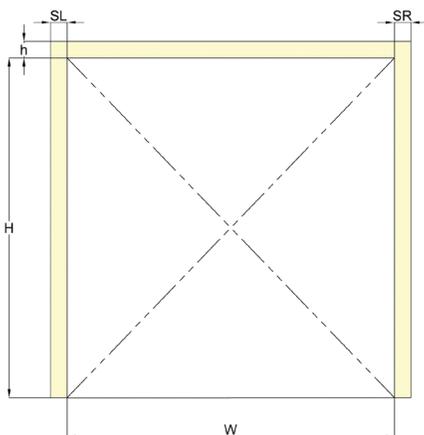
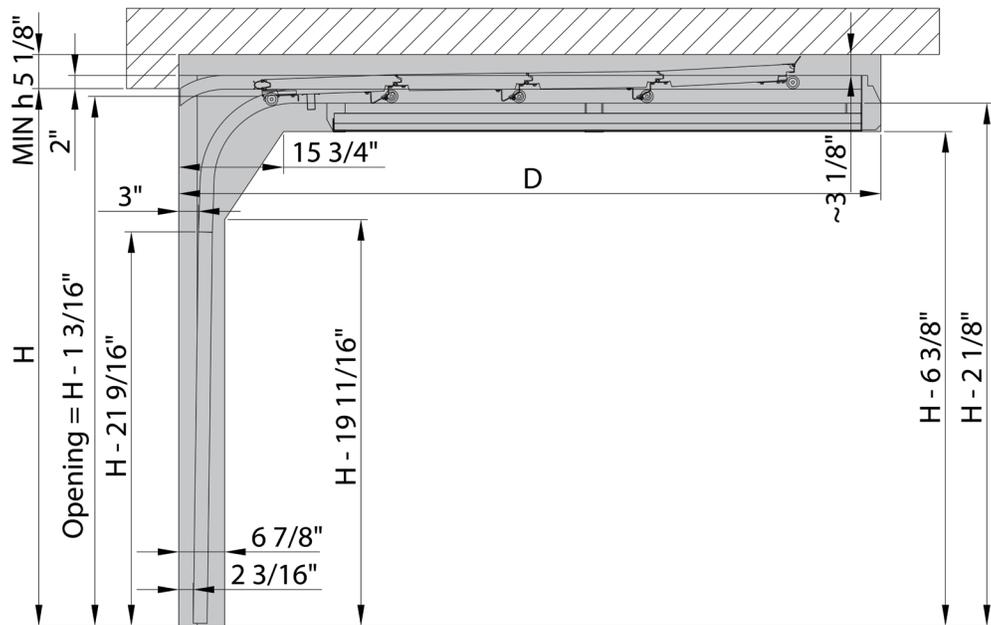
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SL / SR (sideroom)	3 1/8"
Daylight opening	H - 1 3/16" (with el. operator)

H	D
≤ 81 1/2"	105 1/2"
81 9/16" - 89 3/8"	113 3/8"
89 7/16" - 94 1/2"	118 5/16"
94 1/2" - 98 7/16"	128 5/16"

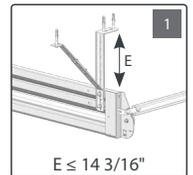
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



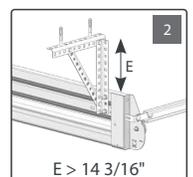
See page 18 for options to reduce required headroom and increase daylight opening.

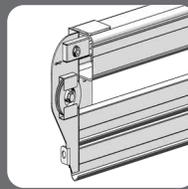


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OPTIONAL





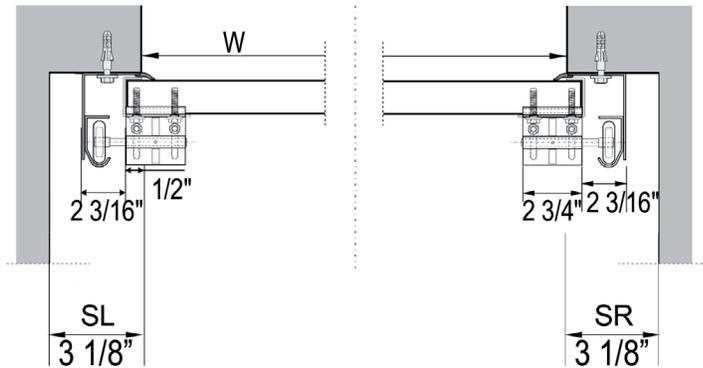
R60 - TM



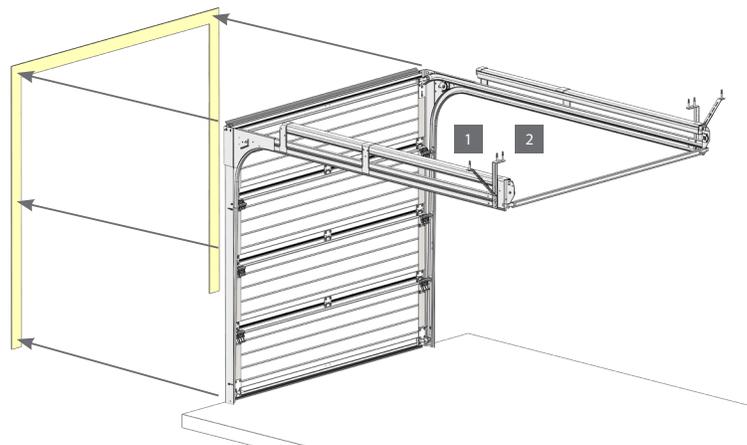
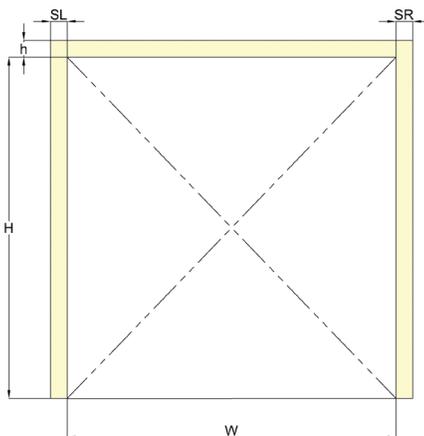
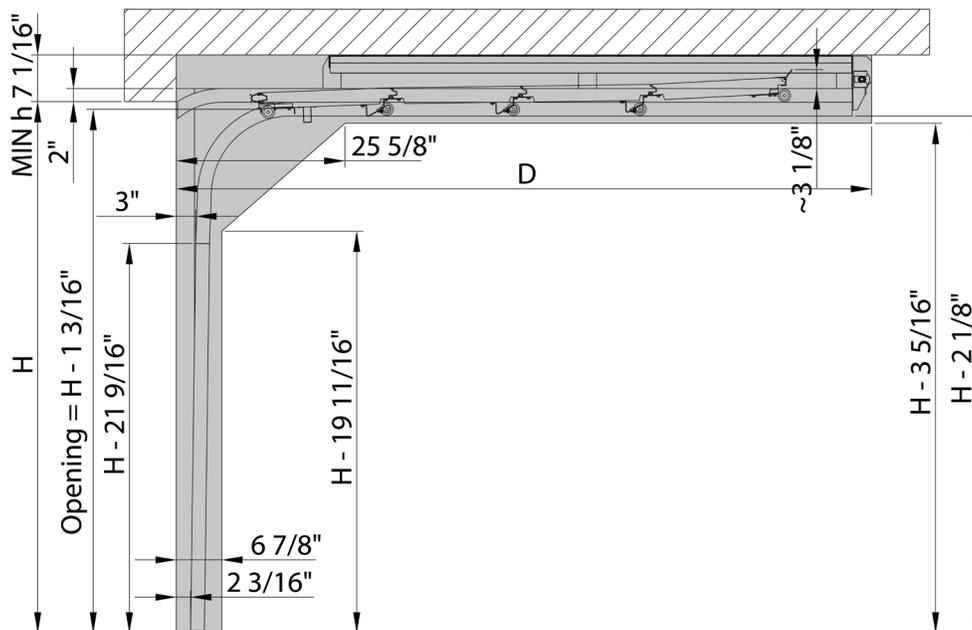
h (headroom)	7 1/16" (with el. operator or manual)
SL / SR (sideroom)	3 1/8"
Daylight opening	H - 1 3/16" (with el. operator)

H	D
≤ 83 5/8"	113 3/8"
83 11/16" - 88 9/16"	118 5/16"
88 9/16" - 98 7/16"	128 5/16"

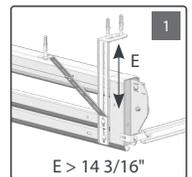
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



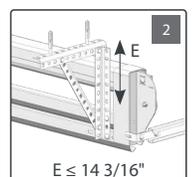
See page 18 for options to reduce required headroom and increase daylight opening.



STANDARD

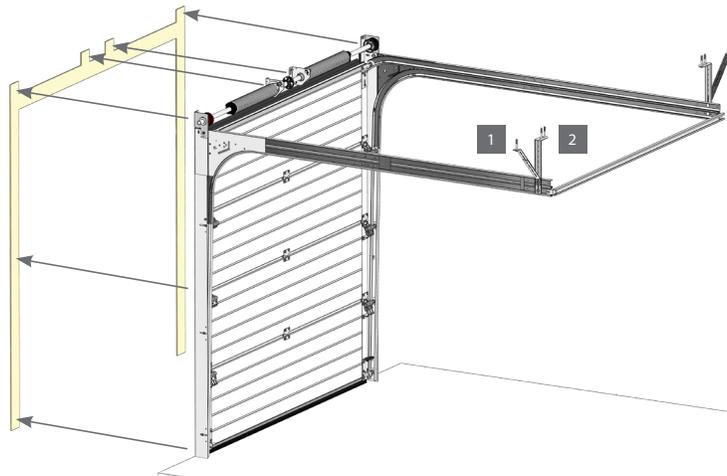
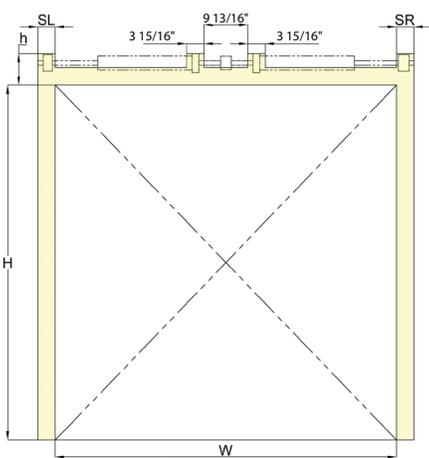
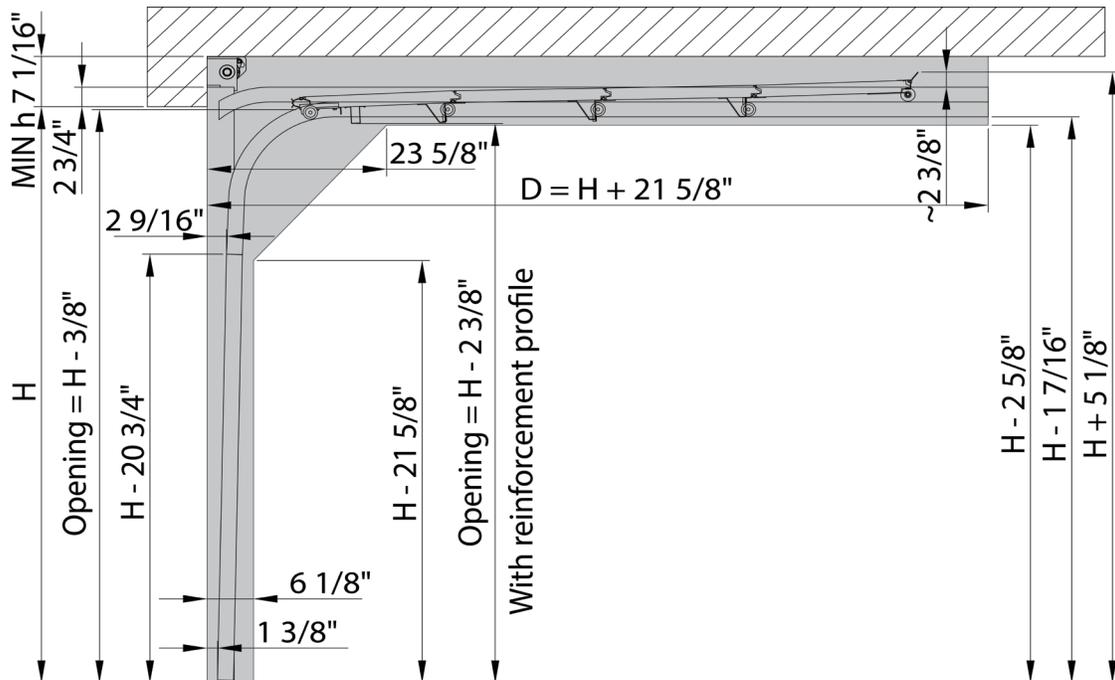
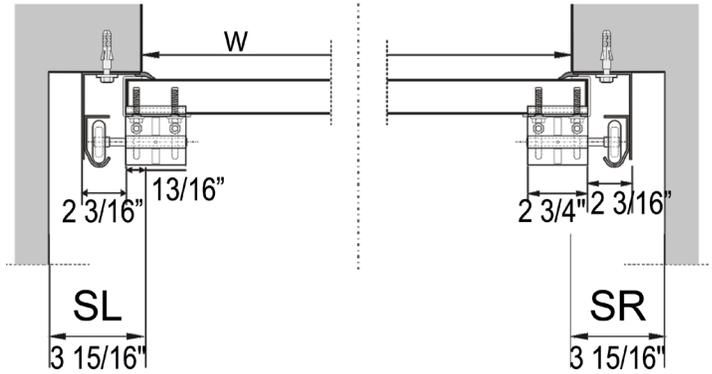


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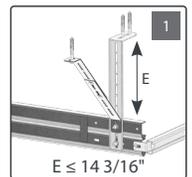


h (headroom)	7 1/16" (with el. operator and manual)
SL / SR (sideroom)	3 15/16"
Daylight opening	H - 5 1/8" (manual) H - 3/8" (with el. operator) H - 2 3/8"; W ≥ 177 3/16" (with el. operator)
D (fitting depth)	H + 21 5/8"

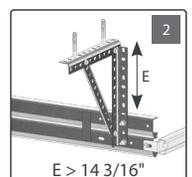
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



STANDARD

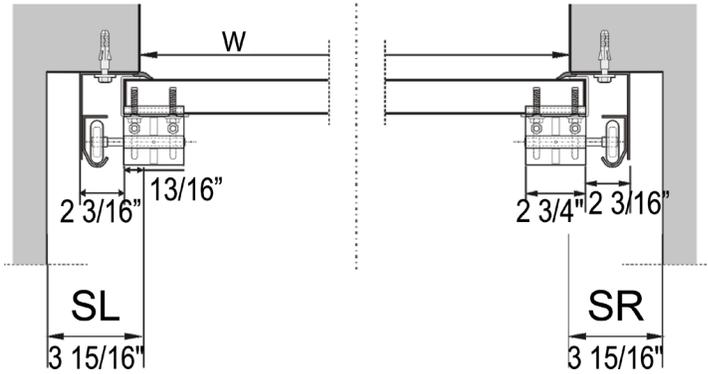


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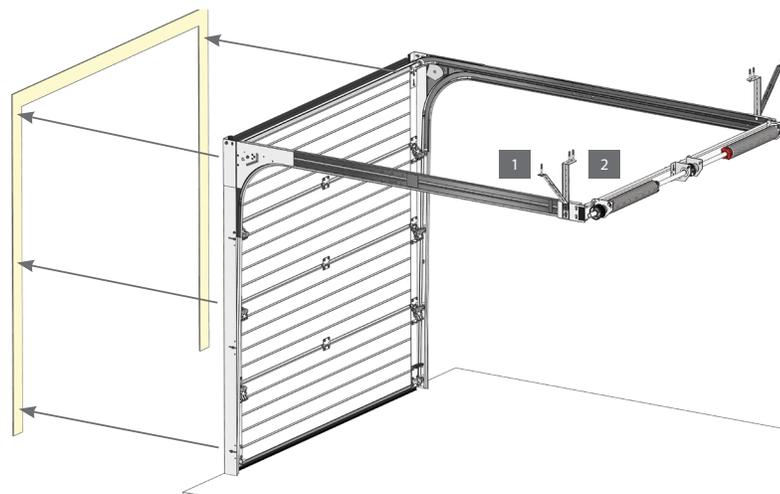
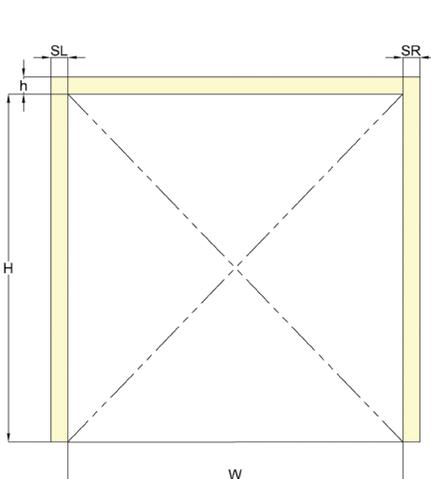
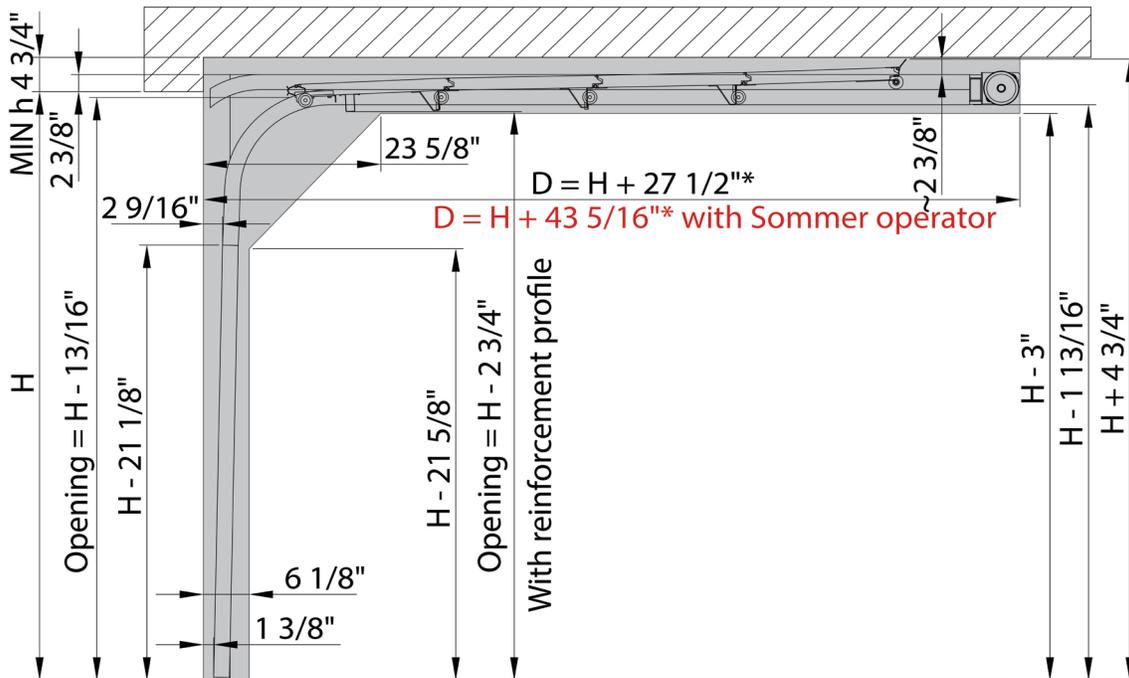


h (headroom)	4 3/4" (manual) 6 5/16" (with el. operator)
SL / SR (sideroom)	3 15/16"
Daylight opening	H - 6 5/16" (manual) H - 13/16" (with el. operator) H - 2 3/4", W ≥ 177 3/16" (with el. operator)
D (fitting depth)	H + 27 9/16" H + 43 5/16" with Sommer operator

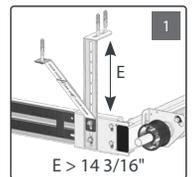
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



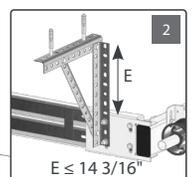
See page 18 for options to reduce required headroom and increase daylight opening.



STANDARD

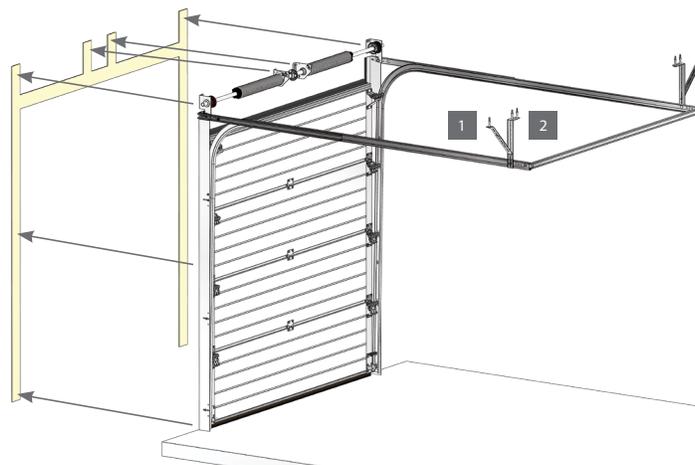
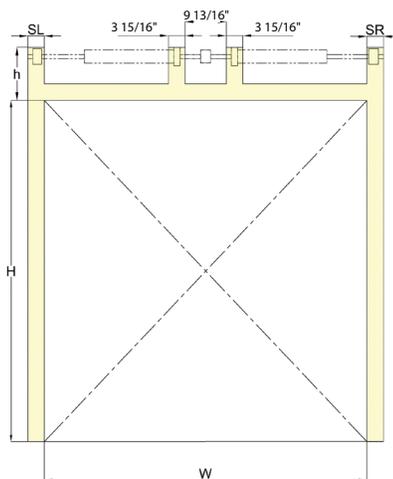
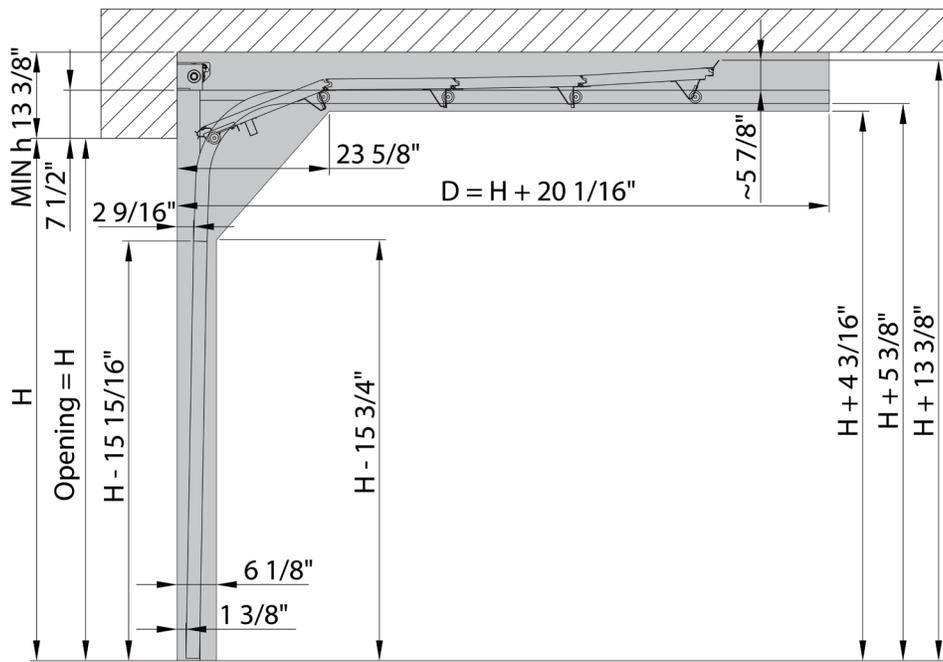
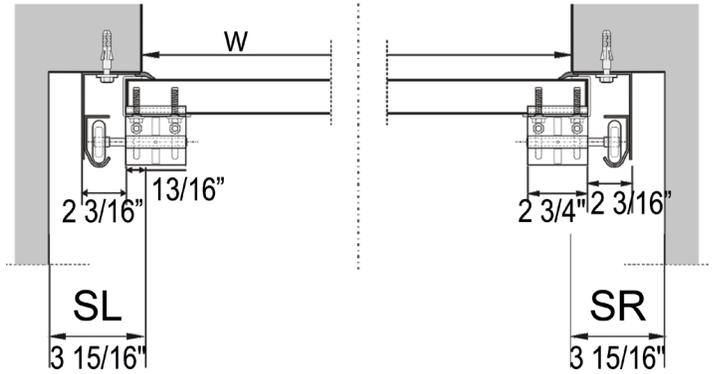


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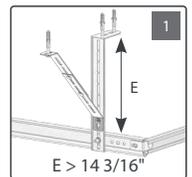


h (headroom)	13 3/8" (manual) 14 9/16" (with el. operator)
SL / SR (sideroom)	3 15/16"
Daylight opening	H
D (fitting depth)	H + 20 1/16"

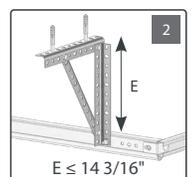
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



STANDARD

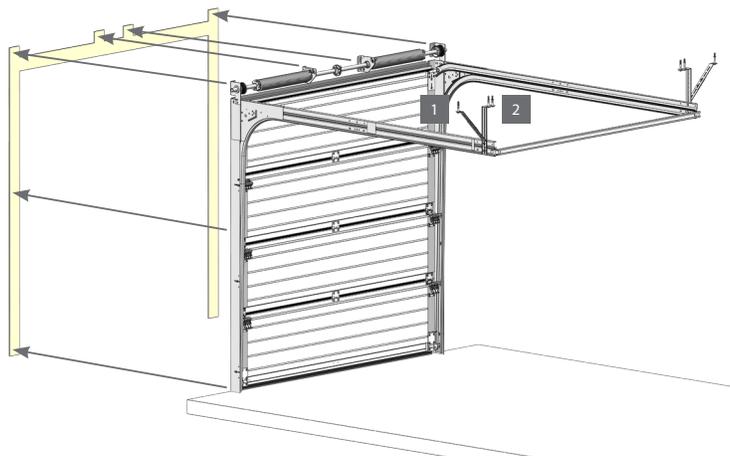
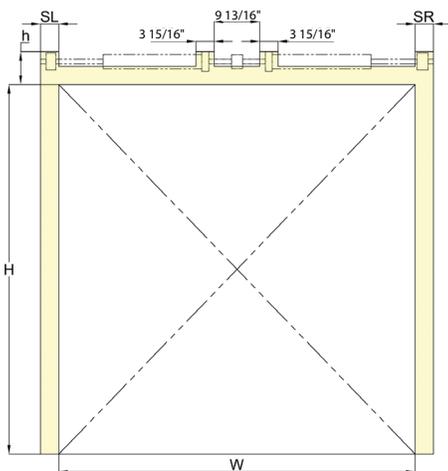
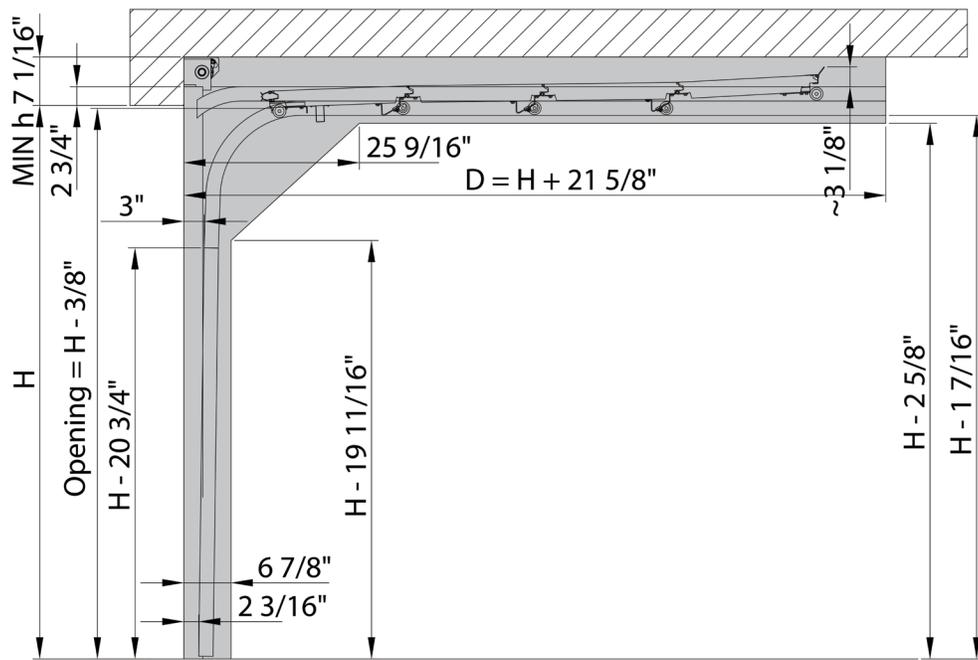
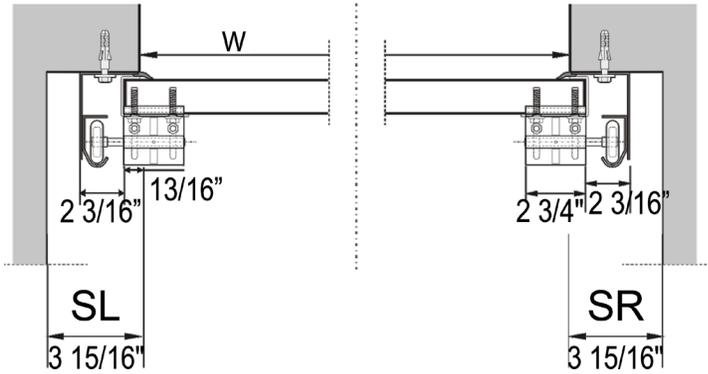


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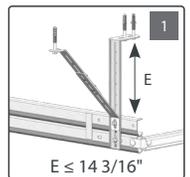


h (headroom)	7 1/16" (with el. operator and manual)
SL / SR (sideroom)	3 15/16"
Daylight opening	H - 5 1/8" (manual) H - 3/8" (with el. operator) H - 2", W ≥ 177 3/16" (with el. operator)
D (fitting depth)	H + 21 5/8"

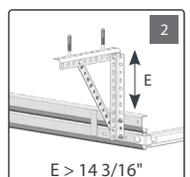
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



STANDARD



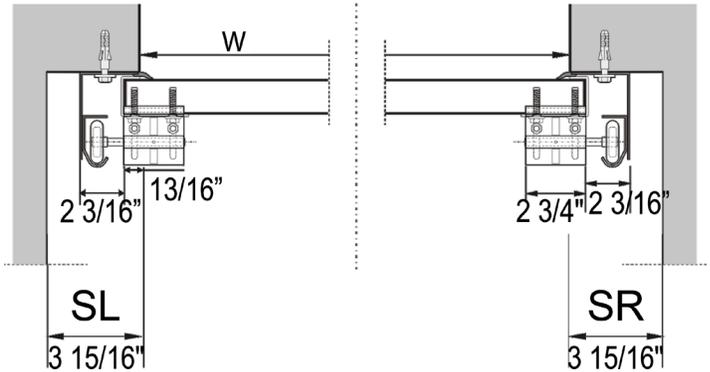
OPTIONAL



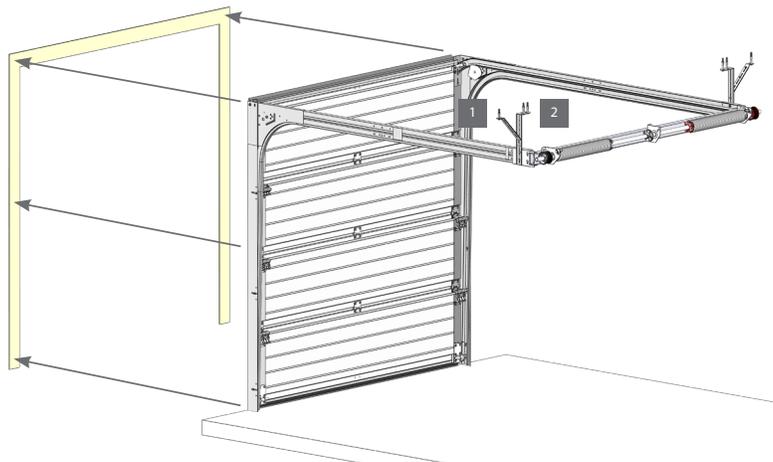
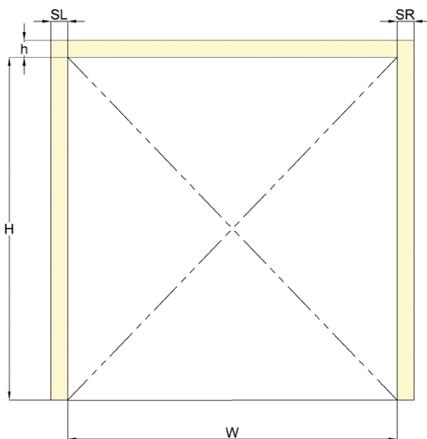
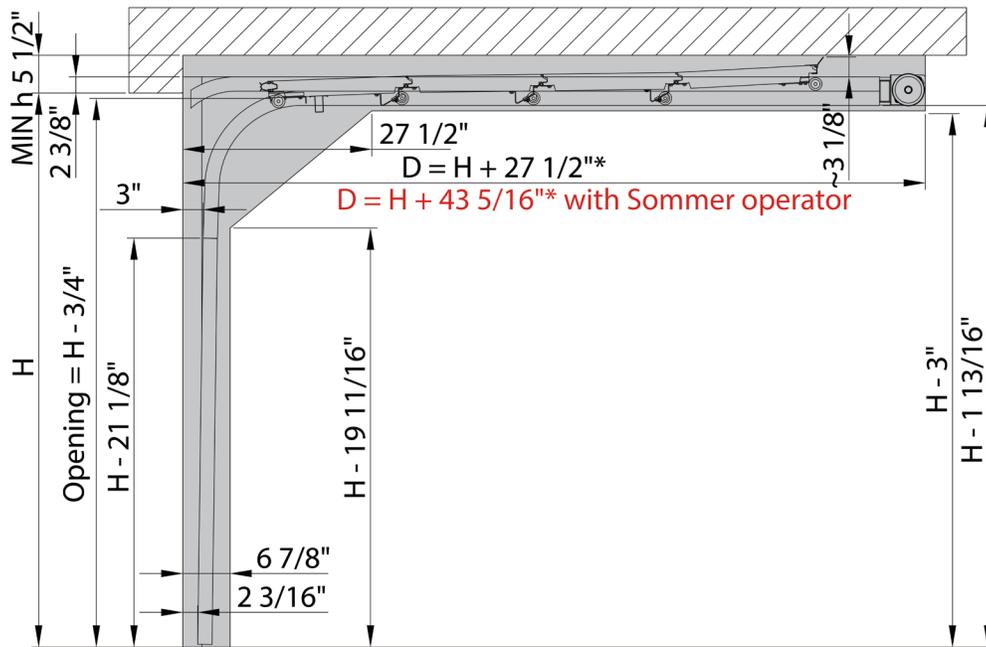
W > 196 7/8" regarding the quantity of springs consult the manufacturer.

h (headroom)	5 1/2" (manual) 7 1/16" (with el. operator)
SL / SR (sideroom)	3 15/16"
Daylight opening	H - 6 5/16" (manual) H - 13/16" (with el. operator) H - 2 3/8", W ≥ 177 3/16" (with el. operator)
D (fitting depth)	H + 27 9/16" H + 43 5/16" with Sommer operator

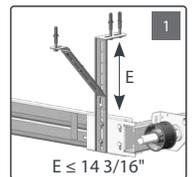
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



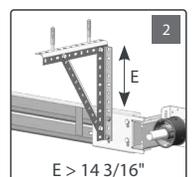
See page 18 for options to reduce required headroom and increase daylight opening.



STANDARD

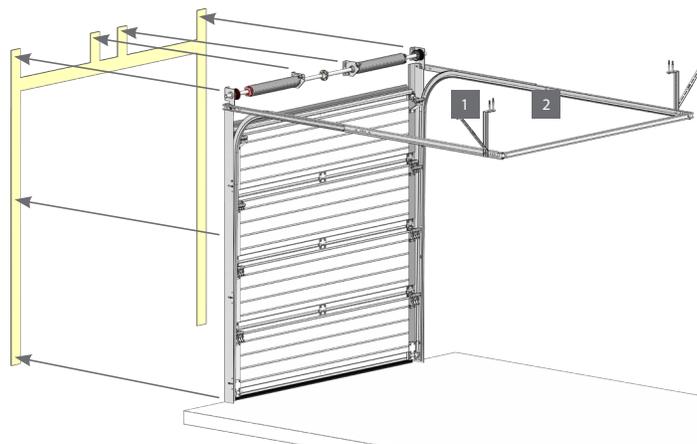
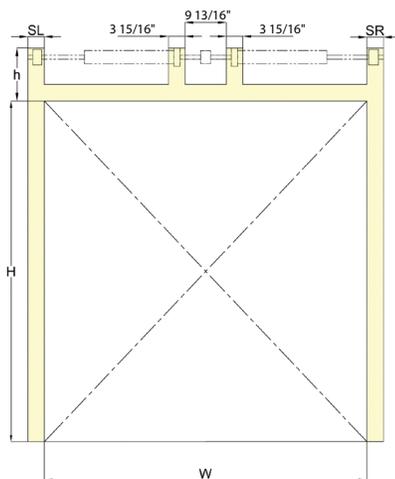
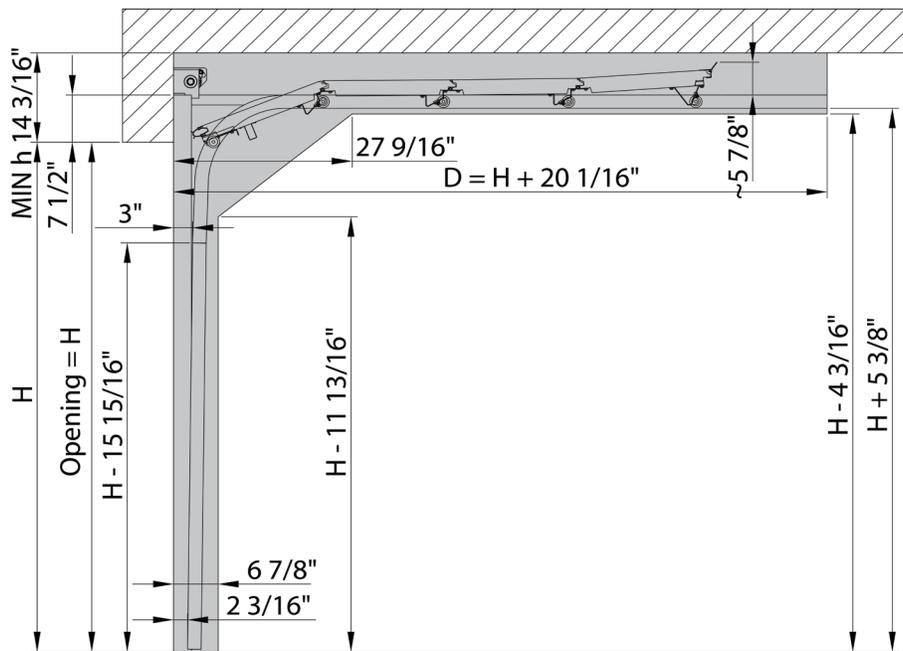
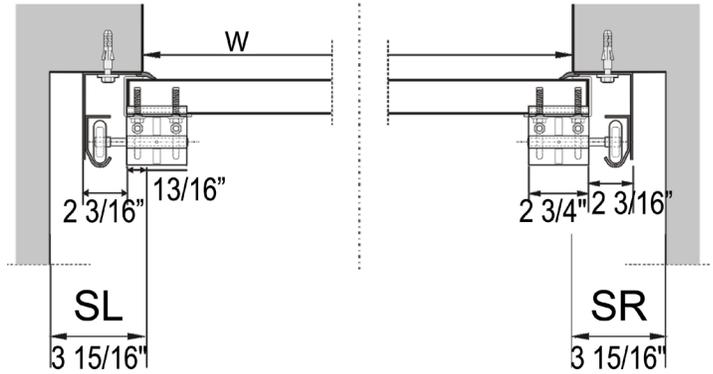


OPTIONAL

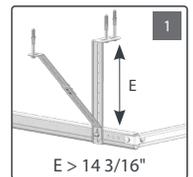


h (headroom)	14 3/16" (manual) 15 3/8" (with el. operator)
SL / SR (sideroom)	3 15/16"
Daylight opening	H
D (fitting depth)	H + 20 1/16"

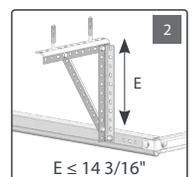
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



STANDARD



OPTIONAL



Additional options to reduce required headroom and increase daylight opening

Min headroom (in)								
Equipment	Model							
	R40 SM		R40 UM		R40 TM		TL40 LHR-RM	
	Manual	Operator	Manual	Operator	Manual	Operator	Manual	Operator
Standard top brackets and top weather seal on panel	4 5/16"	5 7/8"	4 5/16"	5 7/8"	7 1/16"	7 1/16"	4 3/4"	6 5/16"
Standard top brackets and top weather seal on lintel	3 9/16"	5 1/8"	3 9/16"	5 1/8"	7 1/16"	7 1/16"	3 9/16"	5 1/8"
Top weather seal on lintel + LHR top brackets (18023)	2 3/4"	4 5/16"	-	-	7 1/16"	7 1/16"	3 1/8"	4 3/4"
Compact tracks	-	4 5/16" (2 3/4"+1 9/16")	-	4 5/16" (2 3/4"+1 9/16")	-	-	-	4 5/16" (2 3/4"+1 9/16")
Universal lock (22008)	3 3/4"	-	3 3/4"	-	7 1/16"	-	4 1/8"	-
Knob lock (22009)	3 15/16"	-	3 15/16"	-	7 1/16"	-	4 5/16"	-
With wicket door	-	-	-	-	-	-	4 1/8"	-

Min headroom (in)								
Equipment	Model							
	R60 SM		R60 UM		R60 TM		TL60 LHR-RM	
	Manual	Operator	Manual	Operator	Manual	Operator	Manual	Operator
Standard top brackets and top weather seal on panel	5 1/8"	6 11/16"	5 1/8"	6 11/16"	7 1/16"	7 1/16"	5 1/2"	7 1/16"
Standard top brackets and top weather seal on lintel	4 5/16"	5 7/8"	4 5/16"	5 7/8"	7 1/16"	7 1/16"	4 5/16"	5 7/8"
Top weather seal on lintel + LHR top brackets (18023)	3 9/16"	5 1/8"	-	-	7 1/16"	7 1/16"	3 15/16"	5 1/2"
Compact tracks	-	-	-	-	-	-	-	-
Universal lock (22008)	4 1/8"	-	4 1/8"	-	7 1/16"	-	4 15/16"	-
Knob lock (22009)	-	-	-	-	-	-	-	-
With wicket door	-	-	-	-	-	-	-	-

Max daylight opening (in)							
Model							
R40 / R60 SM		R40 / R60 UM		R40 / R60 TM		TL40 / TL60 LHR-RM	
Manual	Operator	Manual	Operator	Manual	Operator	Manual	Operator
H-4 3/4"	H-1 3/16"	H-4 3/4"	H-1 3/16"	H-4 3/4"	H-1 3/16"	H-6 5/16"	H-13/16" (W ≤ 177 3/16") H-2 3/8" (W > 177 3/16")

For full daylight opening use extended vertical tracks +1 3/16" (R40/R60 UM/SM/TM), +13/16" LHR-RM (W ≤ 177 3/16").

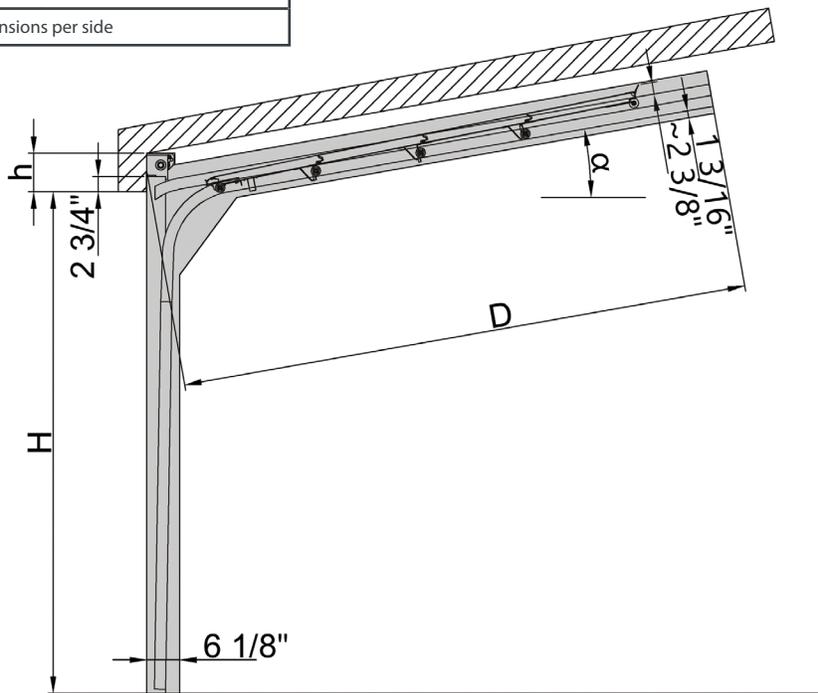
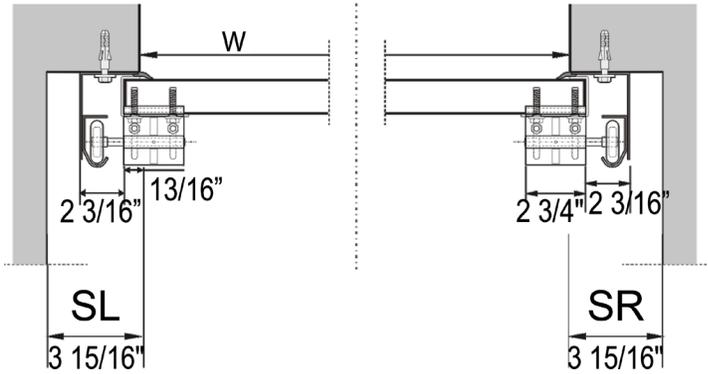
You need more headroom (+1 3/16" or +13/16") then required min headroom.

Fitting depth (in)								
Opening H, in	Model							
	R40 / R60 SM		R40 / R60 UM		R40 / R60 TM		TL40 / TL60 LHR-RM	
≤ 81 1/2"	107 1/16"		105 1/2"		105 1/2"		H+27 9/16"	
81 9/16" - 89 3/8"	114 15/16"		113 3/8"		113 3/8"		H+27 9/16"	
89 7/16" - 94 1/2"	119 15/16"		118 5/16"		118 5/16"		H+27 9/16"	
94 1/2" - 98 7/16"	129 15/16"		128 5/16"		128 5/16"		H+27 9/16"	

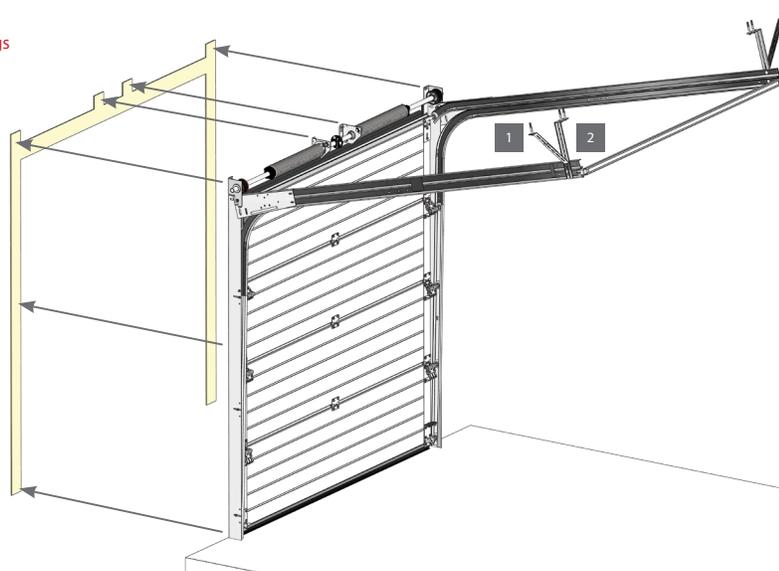
Min sideroom (in)							
Model							
R40 / R60 SM		R40 / R60 UM		R40 / R60 TM		TL40 / TL60 LHR-RM	
5 7/8"		3 1/8"		3 1/8"		3 15/16"	

h (headroom)	Go to page 22
SL / SR (sideroom)	3 15/16"
Daylight opening	H - 5 1/8" (manual) H - 3/8" (with el. operator) H - 2"; W ≥ 177 3/16" (with el. operator)
D (fitting depth)	H + 21 5/8"

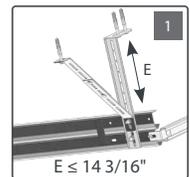
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



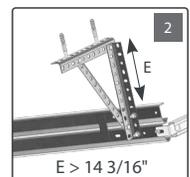
Regarding quantity of springs consult manufacturer.



STANDARD

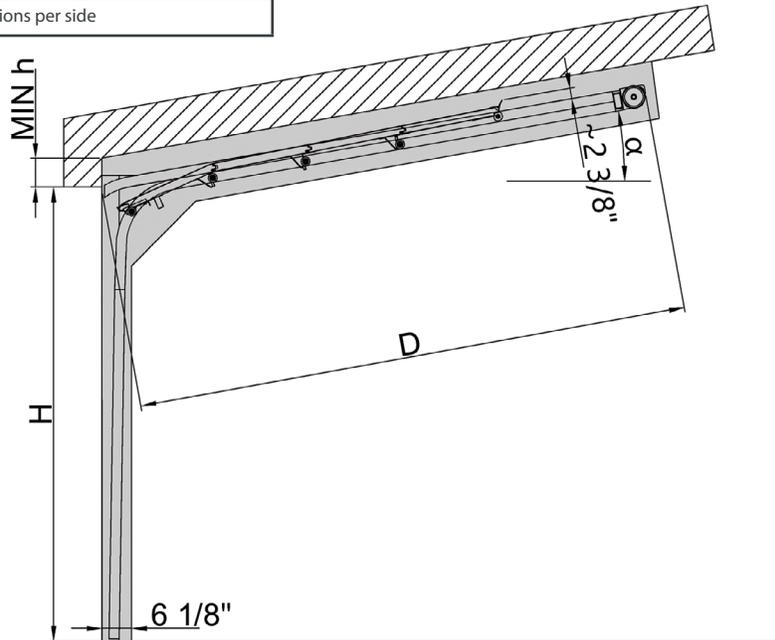
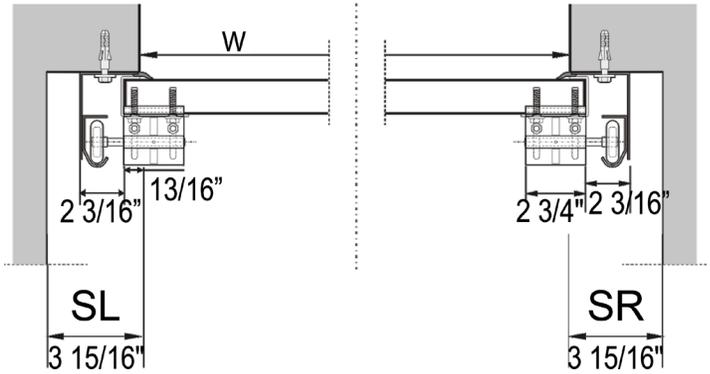


OPTIONAL

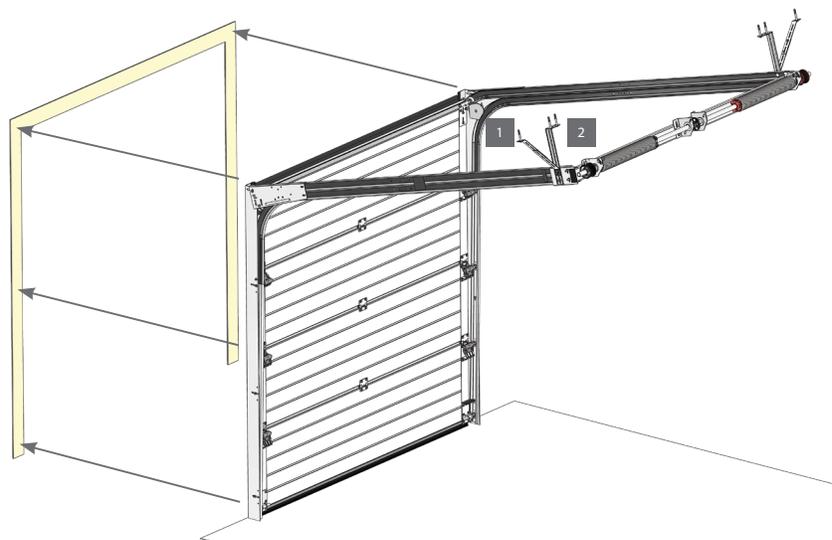


h (headroom)	4 3/4" (manual) $\alpha \leq 15^\circ$ 6 5/16" (with el. operator) $\alpha \leq 15^\circ$ *for bigger angle consult manufacturer
SL / SR (sideroom)	3 15/16"
Daylight opening	H - 6 5/16" (manual) H - 13/16" (with el. operator) H - 2 3/8", W ≥ 177 3/16" (with el. operator)
D (fitting depth)	H + 27 9/16" H + 43 5/16" (with Sommer operator)

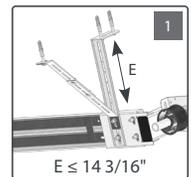
Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



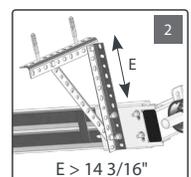
Regarding quantity of springs consult manufacturer.



STANDARD

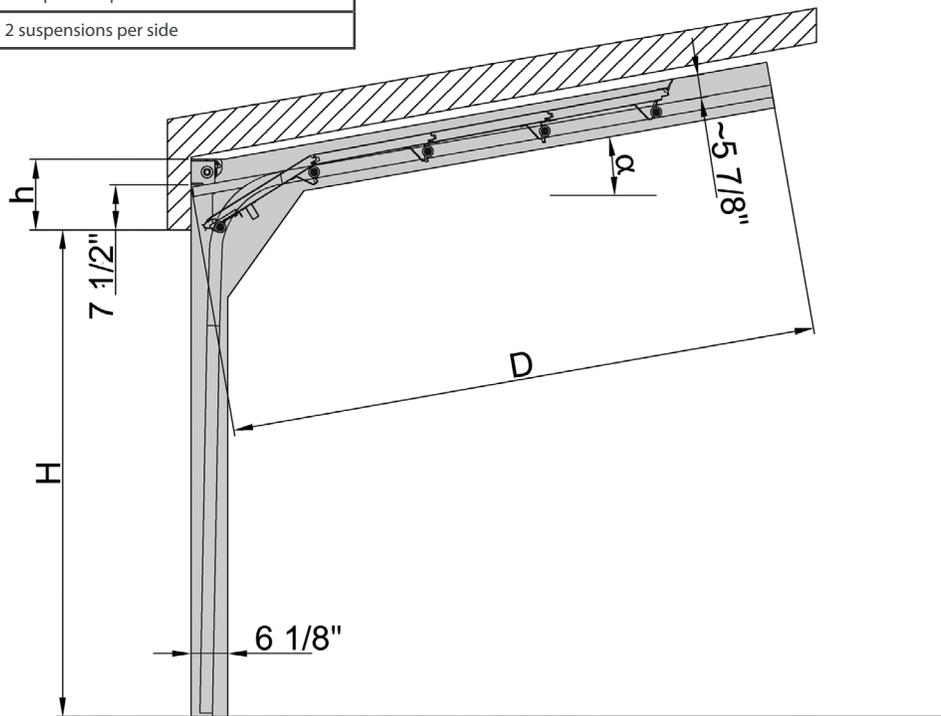
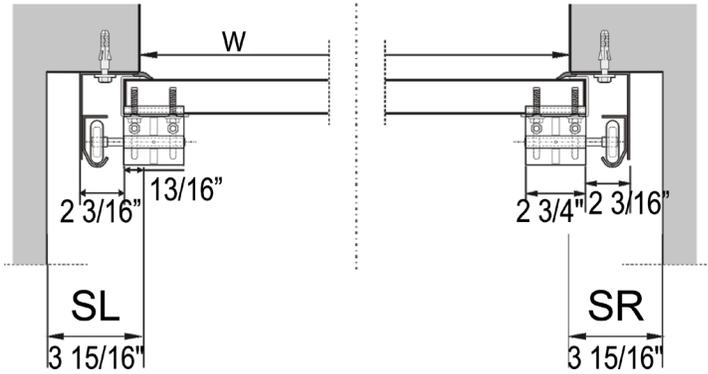


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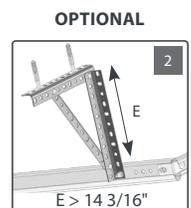
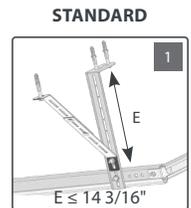
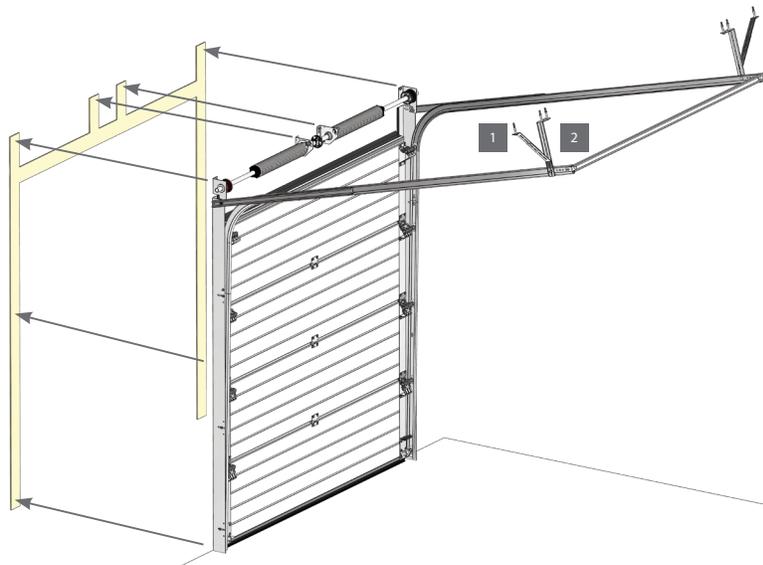


h (headroom)	Go to page 22
SL / SR (sideroom)	3 15/16"
Daylight opening	H
D (fitting depth)	H + 20 1/16"

Number of required suspensions	
W ≤ 118 1/8"	1 suspension per side
W > 118 1/8"	2 suspensions per side



Regarding quantity of springs consult manufacturer.





All sizes are for doors without operator.

TL40 Required headroom for doors with Woodgrain / Stucco panels										
	$\alpha \leq 10^\circ$		$10^\circ < \alpha \leq 15^\circ$		$15^\circ < \alpha \leq 20^\circ$		$20^\circ < \alpha \leq 25^\circ$		$25^\circ < \alpha \leq 30^\circ$	
	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM
H ≤ 78 3/4"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"
H ≤ 88 9/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"
H ≤ 98 7/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"
H ≤ 108 1/4"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"	14 9/16"	10 5/8"	14 9/16"	10 5/8"
H ≤ 118 1/8"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"	14 9/16"	10 5/8"	14 9/16"	10 5/8"

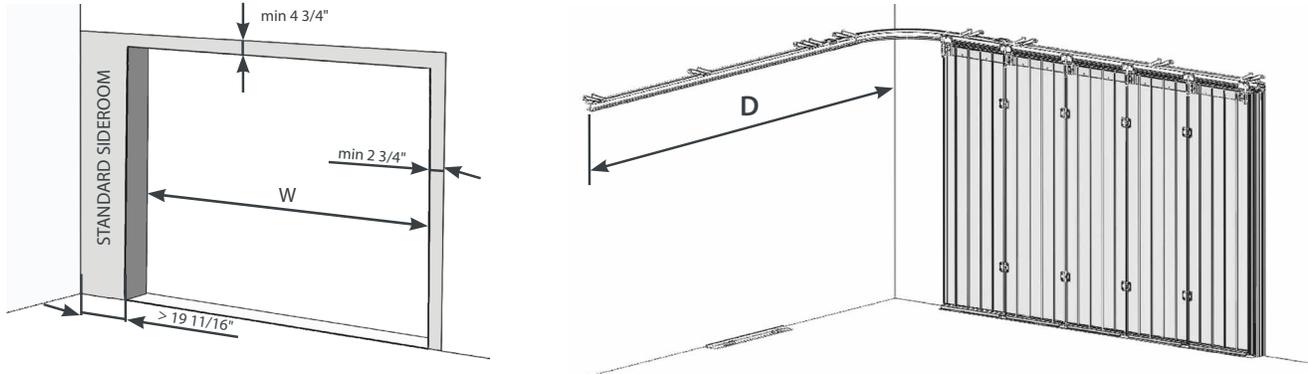
TL40 Required headroom for doors with Woodgrain / Stucco panels and wicket door										
	$\alpha \leq 10^\circ$		$10^\circ < \alpha \leq 15^\circ$		$15^\circ < \alpha \leq 20^\circ$		$20^\circ < \alpha \leq 25^\circ$		$25^\circ < \alpha \leq 30^\circ$	
	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM
H ≤ 78 3/4"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"
H ≤ 88 9/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"	14 9/16"	10 5/8"
H ≤ 98 7/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"	14 9/16"	10 5/8"
H ≤ 108 1/4"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"	14 9/16"	10 5/8"
H ≤ 118 1/8"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"	14 9/16"	10 5/8"

TL40 Required headroom for doors with smooth (SLICK type) panels										
	$\alpha \leq 10^\circ$		$10^\circ < \alpha \leq 15^\circ$		$15^\circ < \alpha \leq 20^\circ$		$20^\circ < \alpha \leq 25^\circ$		$25^\circ < \alpha \leq 30^\circ$	
	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM
H ≤ 78 3/4"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"
H ≤ 88 9/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"
H ≤ 98 7/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"	14 9/16"	10 5/8"
H ≤ 108 1/4"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"	14 9/16"	10 5/8"
H ≤ 118 1/8"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"	14 9/16"	10 5/8"

TL40 Required headroom for doors with smooth (SLICK type) panels and wicket door										
	$\alpha \leq 10^\circ$		$10^\circ < \alpha \leq 15^\circ$		$15^\circ < \alpha \leq 20^\circ$		$20^\circ < \alpha \leq 25^\circ$		$25^\circ < \alpha \leq 30^\circ$	
	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM
H ≤ 78 3/4"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"
H ≤ 88 9/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"
H ≤ 98 7/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"	14 9/16"	10 5/8"
H ≤ 108 1/4"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"	14 9/16"	10 5/8"	14 9/16"	10 5/8"
H ≤ 118 1/8"	13 3/8"	7 1/16"	13 3/8"	7 1/16"	14 9/16"	10 5/8"	14 9/16"	10 5/8"	14 9/16"	10 5/8"

TL60 Required headroom for doors with smooth (SLICK type) panels										
	$\alpha \leq 10^\circ$		$10^\circ < \alpha \leq 15^\circ$		$15^\circ < \alpha \leq 20^\circ$		$20^\circ < \alpha \leq 25^\circ$		$25^\circ < \alpha \leq 30^\circ$	
	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM	STD	LHR-FM
H ≤ 78 3/4"	14 3/16"	7 1/16"	14 3/16"	7 1/16"	14 3/16"	7 1/16"	14 3/16"	7 1/16"	15 3/8"	10 5/8"
H ≤ 88 9/16"	14 3/16"	7 1/16"	14 3/16"	7 1/16"	14 3/16"	7 1/16"	14 3/16"	7 1/16"	15 3/8"	10 5/8"
H ≤ 98 7/16"	14 3/16"	7 1/16"	14 3/16"	7 1/16"	15 3/8"	10 5/8"	15 3/8"	10 5/8"	15 3/8"	10 5/8"
H ≤ 108 1/4"	14 3/16"	7 1/16"	14 3/16"	7 1/16"	15 3/8"	10 5/8"	15 3/8"	10 5/8"	15 3/8"	10 5/8"
H ≤ 118 1/8"	14 3/16"	7 1/16"	14 3/16"	7 1/16"	15 3/8"	10 5/8"	15 3/8"	10 5/8"	15 3/8"	10 5/8"

STANDARD SIDEROOM



SMALL SIDEROOM

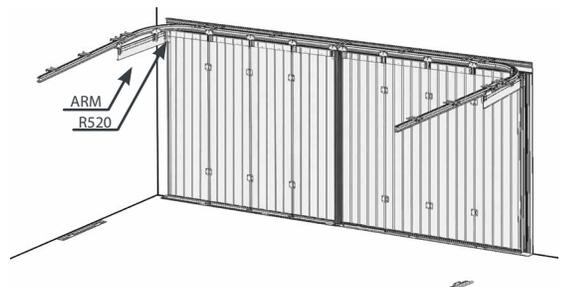
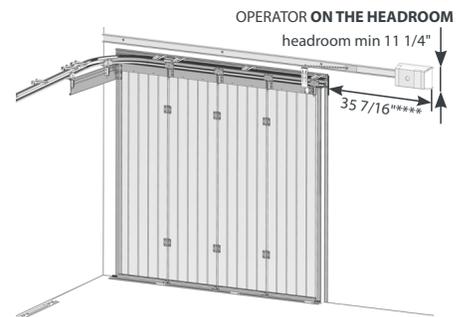
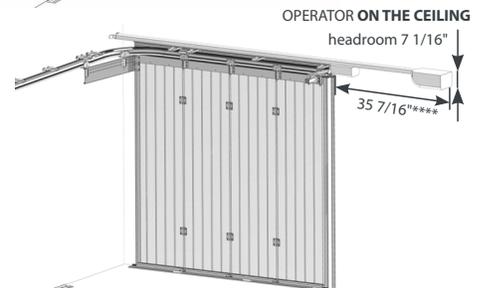
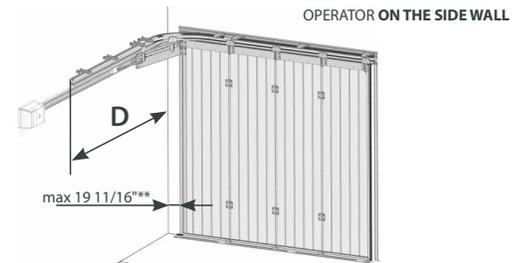
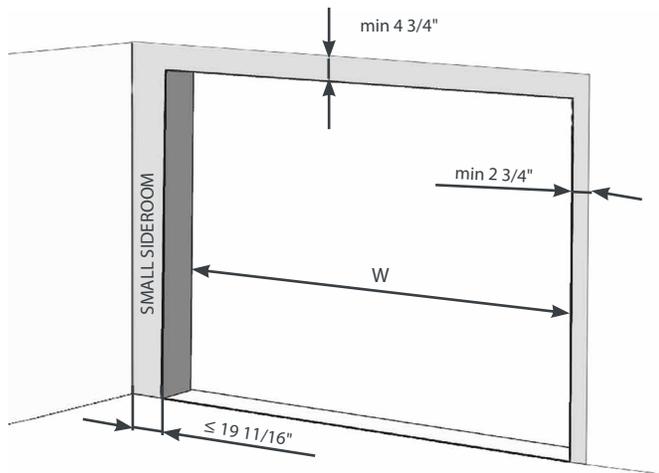
Sideroom*	Radius	Arm	D	Operator fitting place***
5 7/8" - 7 7/8"	R520	R520 + ARM L = 39 3/8"	W + 49 3/16"	Side wall only
7 15/16" - 11 13/16"	R520	R520 + ARM L = 23 5/8"	W + 31 1/2"	Side wall
11 7/8" - 19 11/16"	R520	R520 + ARM L = 15 3/4"	W + 23 5/8"	Side wall
> 19 11/16"	R420	-	W + 3 15/16"	Lintel

*Min sideroom on opening side (for manual operator min 7 7/8" required).

**Max 19 11/16" sideroom with operator on the side wall.

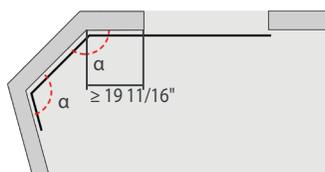
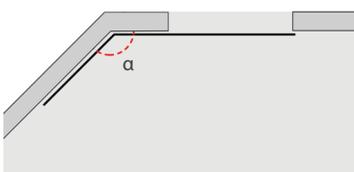
***Operator movement range must be longer than W, if standard rail is too short use additional rail extensions.

****Sideroom for a different distance, consult the manufacturer regarding the specific operator.

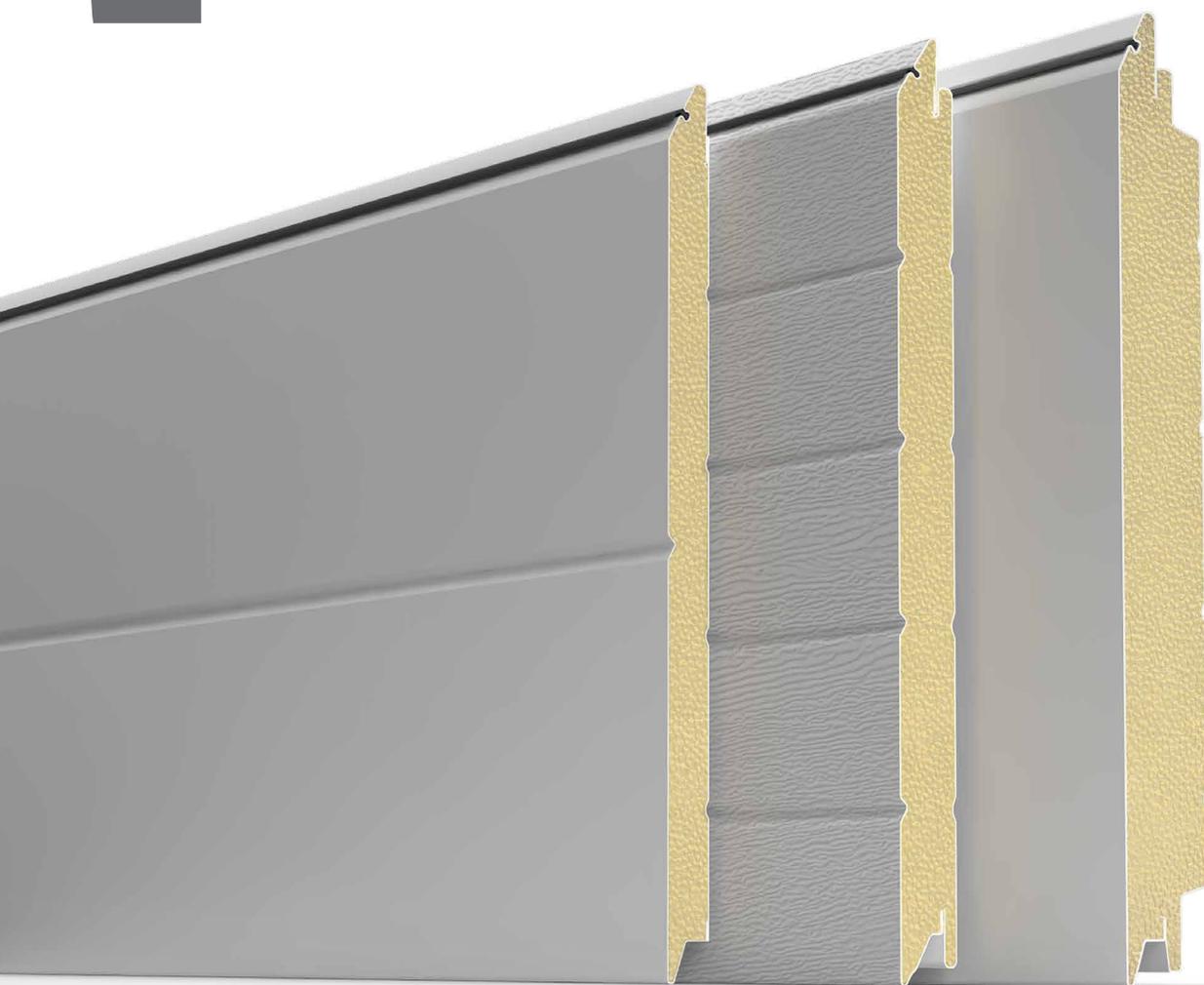


Single door
H = max 118 1/8", W = max 236 1/4"

Angle ranges
$\alpha = \text{min } 85^\circ, \text{max } 180^\circ$

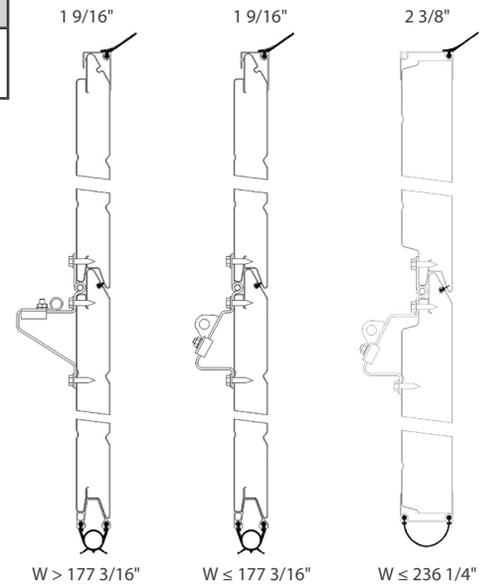
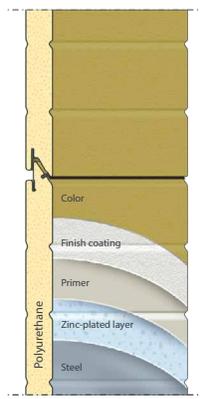


PANELS



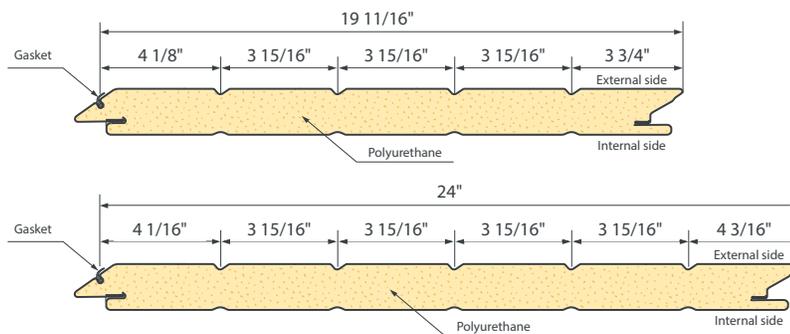
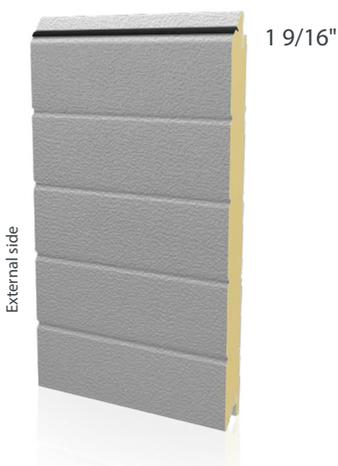
Panel type	S (in)	Panel weight		Tolerances			U value W/m2K	R value BTU/ft² °F h
		lb/ft	lb/ft²	Thickness	Width	Length		
R - 500	1 9/16"	3.19	1.95	+/- 1/16"	+/- 1/32"	+/- 3/16"	0.53	10.71
R - 610		3.80	1.90					
R - 500	2 3/8"	4.36	2.64				0.36	15.77
R - 610		5.27						

Section type*	U value (W/m2K)	R value (ft² °F h/BTU)	Wind load resistance class	Water penetration class	Air permeability class
Sandwich	0.93 - 1.5	6.10 - 3.79	5	3	2

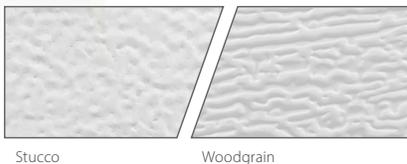


All panels internal side - ribbed, Stucco embossed RAL 9002.

RIB



Surface textures



Standard colors

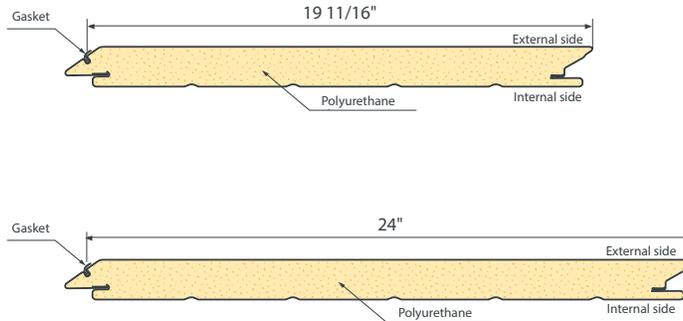
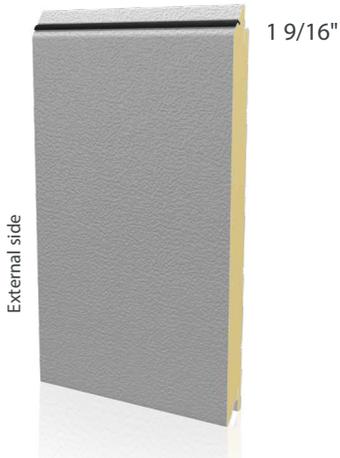


Other painted colors similar to RAL palette

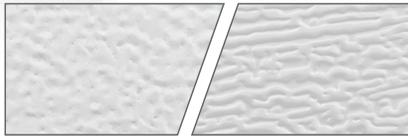
Exact door classifications are calculated for each door individually and may differ from the numbers listed above. The precise values depend on the specific size and configuration of each door.

*Other specific colors and the NCS palette are available on request.

FLUSH



Surface textures



Stucco

Woodgrain

Standard colors



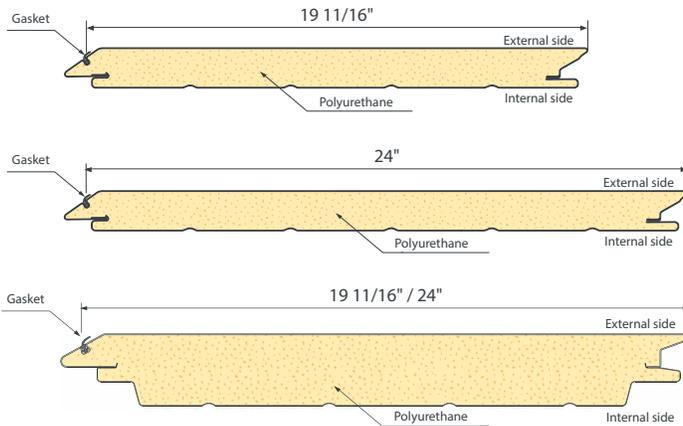
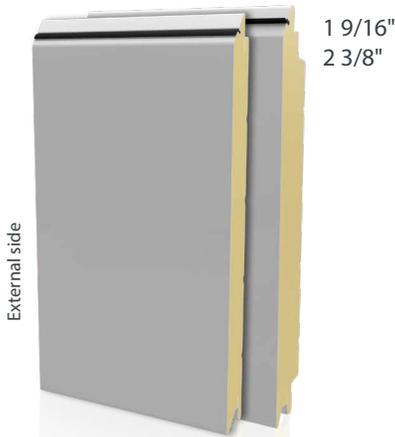
RAL 9016

RAL 7016

Other painted colors similar to RAL palette 

*Other specific colors and the NCS palette are available on request.

SLICK



Surface texture



Smooth

Standard colors 1 9/16"



RAL 9016

RAL 9006

RAL 9004

RAL 7016

Standard colors 2 3/8"



RAL 9016

RAL 7016

Other painted colors similar to RAL palette 

RAL pearl colors 

*Other specific colors and the NCS palette are available on request.
**Smooth surface only

SLICK PLUS

Surface textures

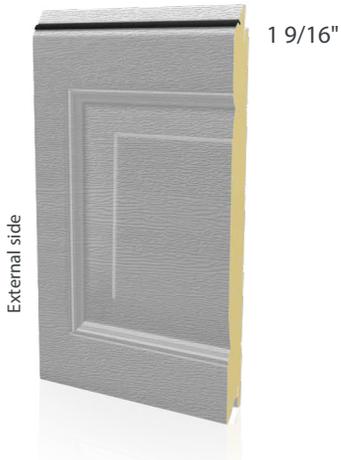


Stainless Steel

Metallic Anthracite

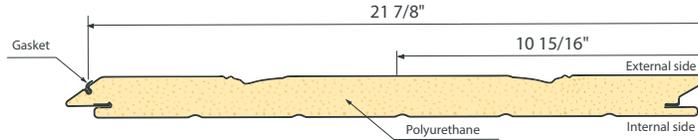
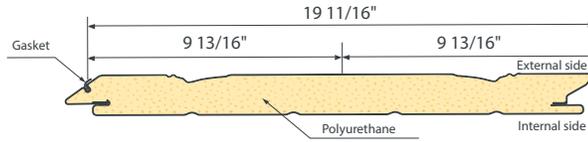
Corten Image

GEORGIAN (CASSETTE)



1 9/16"

External side



Surface texture



Woodgrain

Standard colors

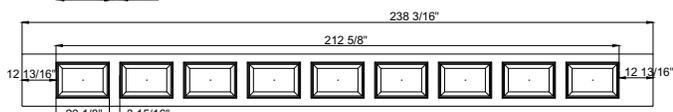
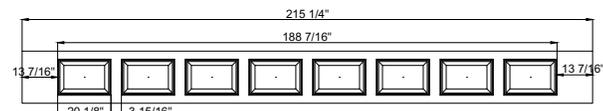
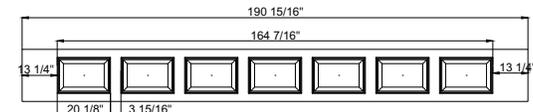
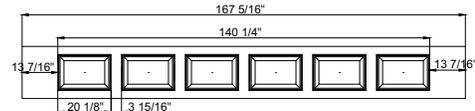
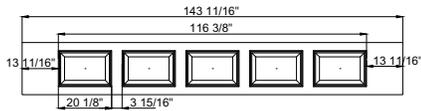
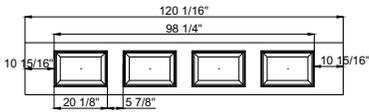
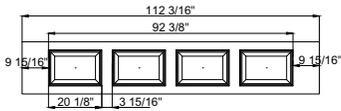
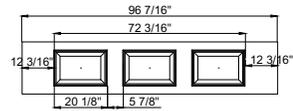


RAL 9016

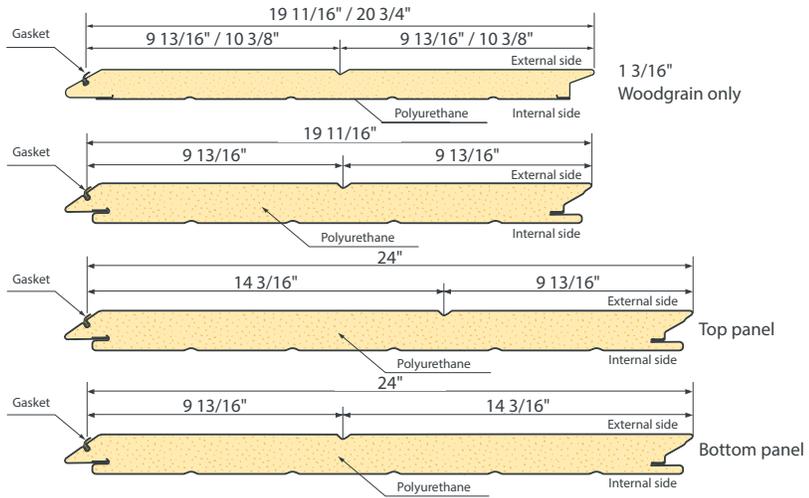
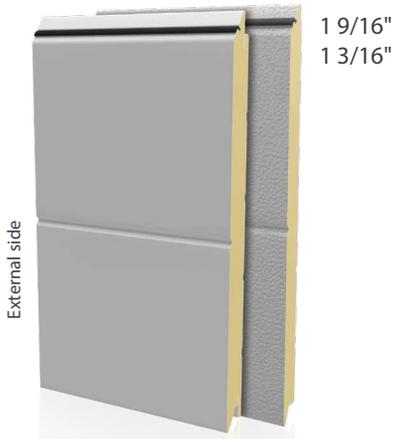
Other painted colors similar to RAL palette



*Other specific colors and the NCS palette are available on request.



MIDRIB



Surface textures



Stucco Woodgrain Smooth

Wood images
Smooth



Light Oak Golden Oak Old Oak Dark Oak Mahogany Winchester

Standard colors
1 9/16"



RAL 9016 Woodgrain Stucco RAL 8017 Woodgrain RAL 7016 Woodgrain RAL 6009 Woodgrain

Standard colors
1 3/16"



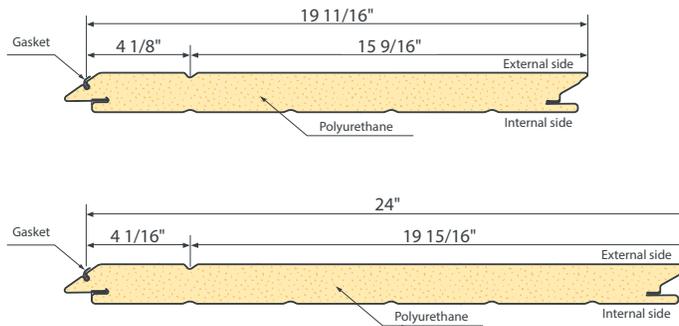
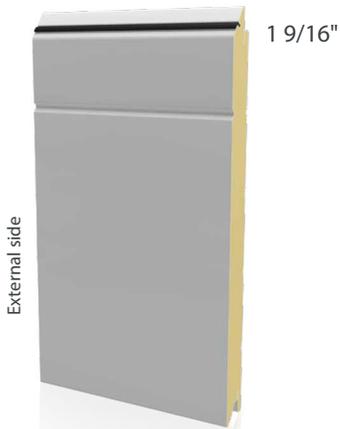
RAL 9016 Woodgrain RAL 7016 Woodgrain

Other painted colors similar to RAL palette *

RAL pearl colors **

*Other specific colors and the NCS palette are available on request.
**Smooth surface only.

TOPRIB



Surface texture



Smooth

Standard colors



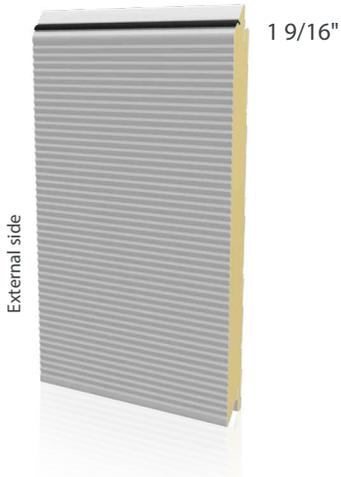
RAL 9016 RAL 7016

Other painted colors similar to RAL palette *

RAL pearl colors **

*Other specific colors and the NCS palette are available on request.
**Smooth surface only.

MICRORIB



Surface texture



Smooth

Standard colors



RAL 9016

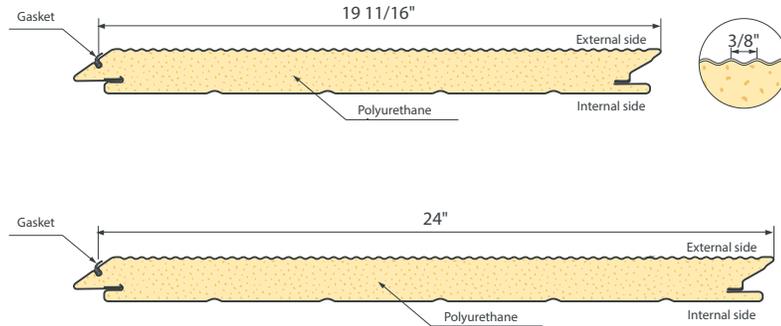
Other painted colors similar to RAL palette



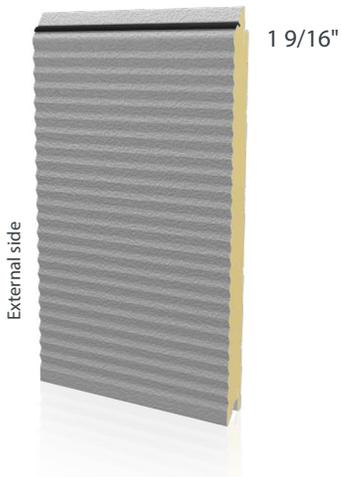
RAL pearl colors



*Other specific colors and the NCS palette are available on request.
**Smooth surface only.



MACRORIB



Surface texture



Stucco

Standard colors



RAL 9016

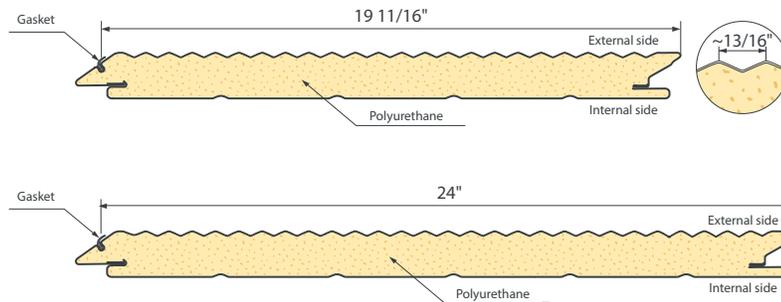
RAL 9007

RAL 7016

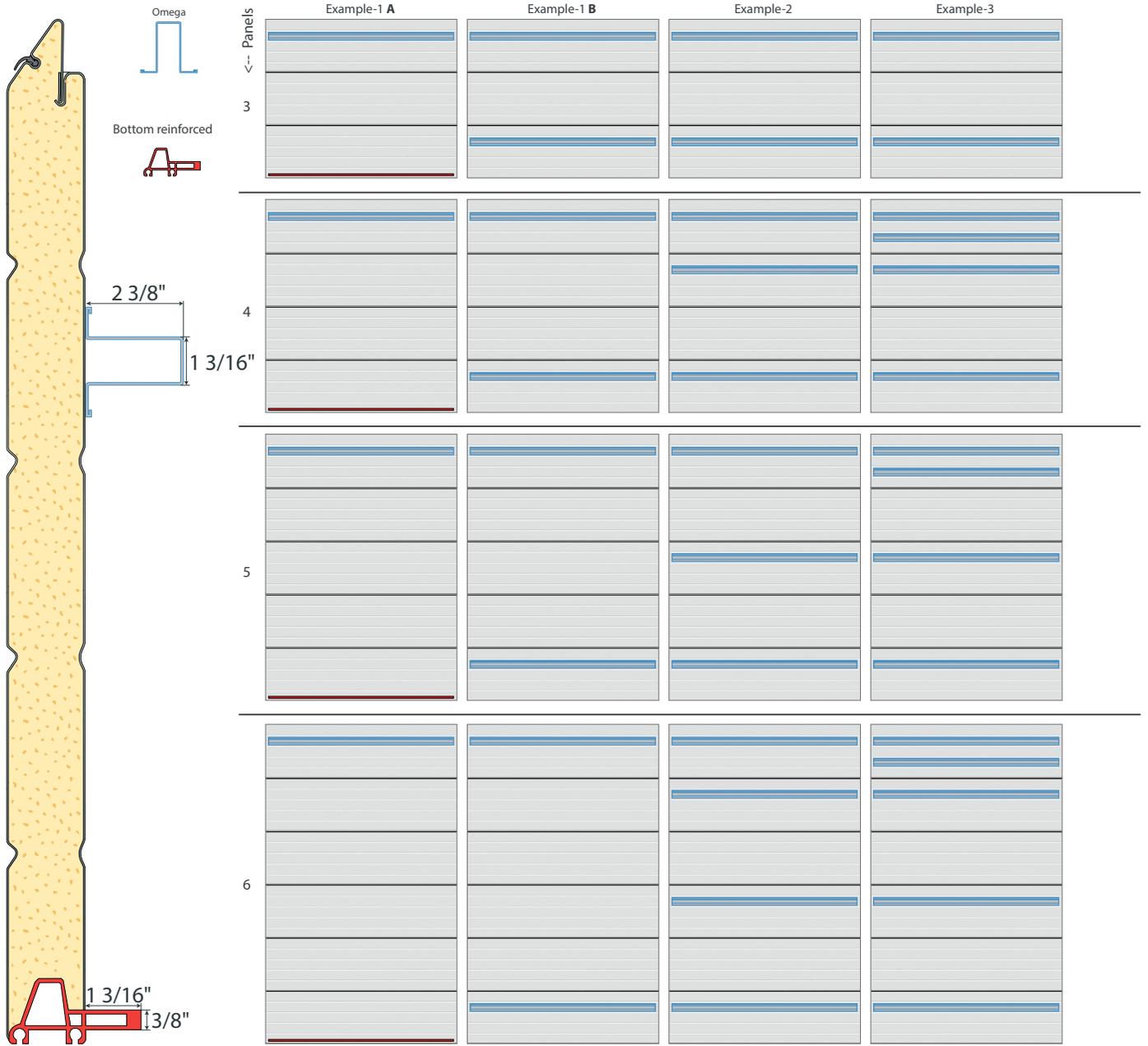
Other painted colors similar to RAL palette



*Other specific colors and the NCS palette are available on request.



Opening width, W	Profile type	Example No.	Main location on panel	Quantity of reinforcements
$W \leq 177 \frac{3}{16}"$	-	-	-	-
$177 \frac{3}{16}" < W \leq 196 \frac{7}{8}"$	Bottom reinforced + omega	1-A	Top of panel (for omega)	1 + 1 = 2
	Omega	1-B		
$196 \frac{7}{8}" < W \leq 216 \frac{9}{16}"$	Omega	2	Top partition of panel	On every second door panel
$216 \frac{9}{16}" < W \leq 236 \frac{1}{4}"$	Omega	3	Top of panel	On every second door panel + 1 on top



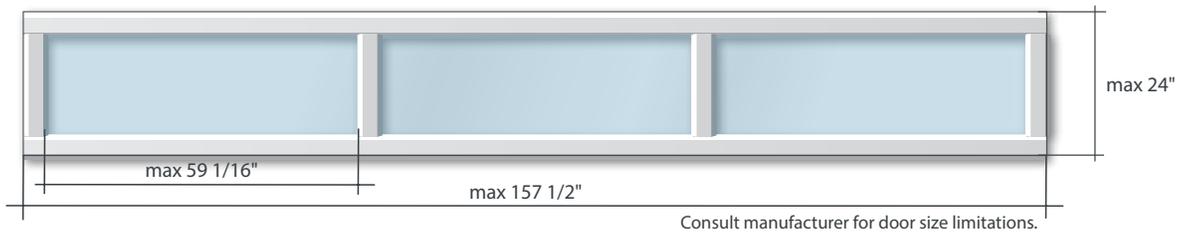
PROFILE FIXING POINTS



DOUBLE INSULATED ACRYLIC (clear / matt / frosted) GLAZING



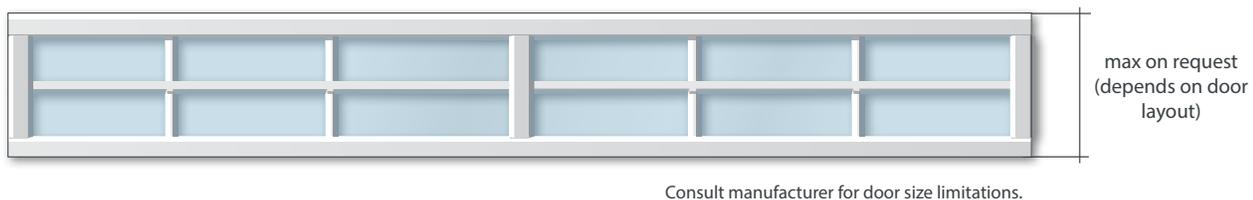
SINGLE / DOUBLE (Safety glass) GLAZING



CONTINUOUS GLAZING

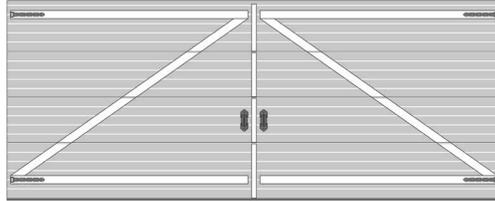
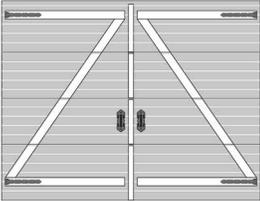


"CROSS" DECORATION

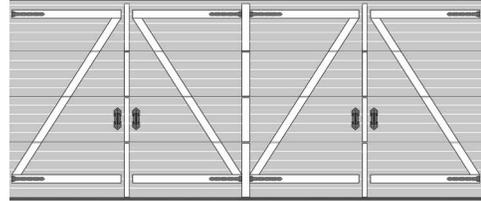


RETRO Z

Z

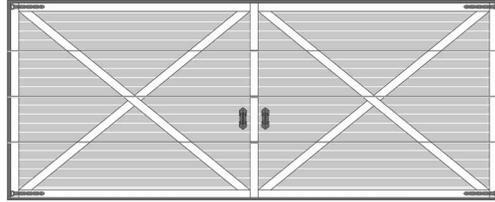
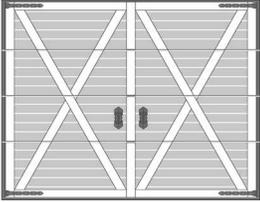


2 Z

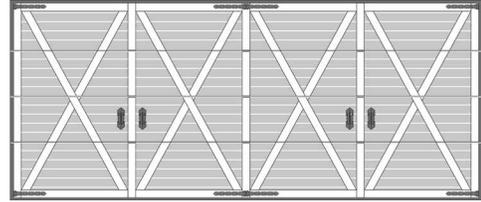


RETRO X

X

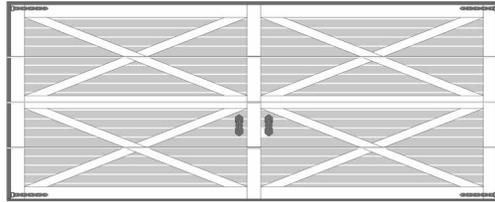
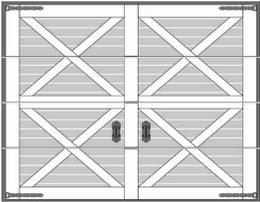


2 X

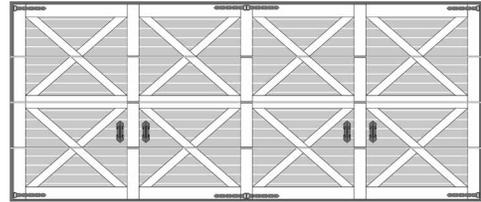


RETRO 4 X

4 X

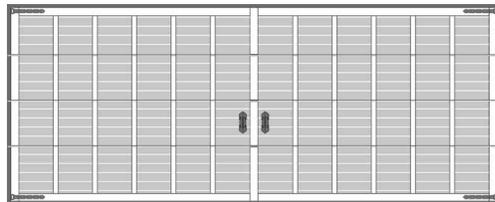


8 X

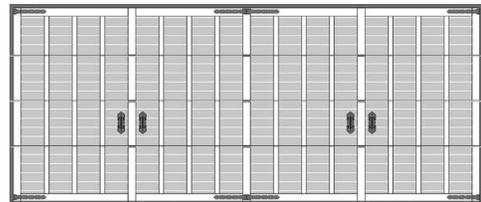


RETRO H

H

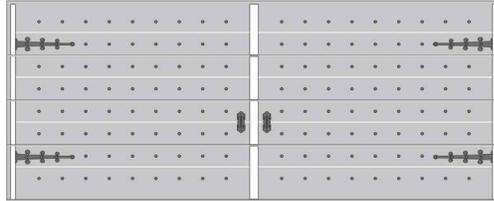
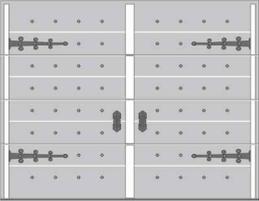


2 H

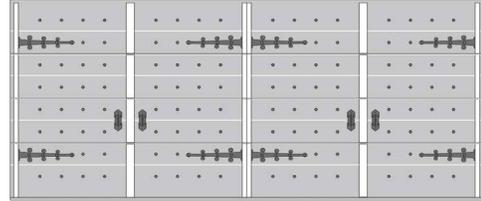


RETRO S

S

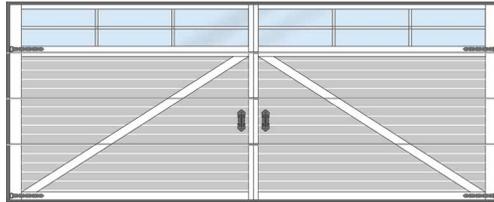


2S

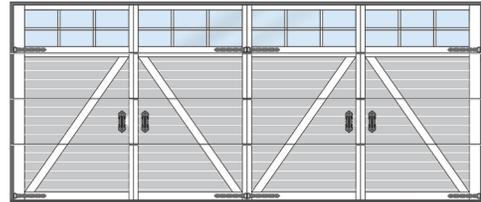


RETRO Z - FV

Z-FV

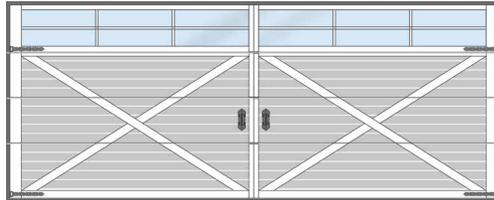
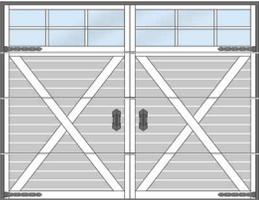


2 Z-FV

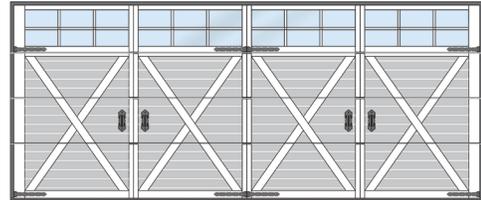


RETRO X - FV

X-FV



2 X-FV



RETRO H - FV

H-FV

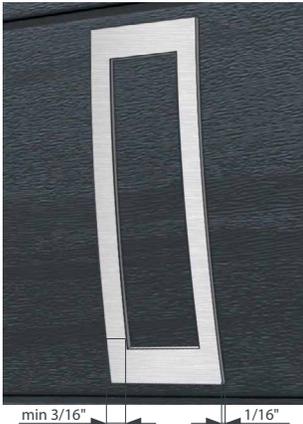


2 H-FV



DECOR ELEMENTS





Brushed



RAL painted



Decor elements combined with windows



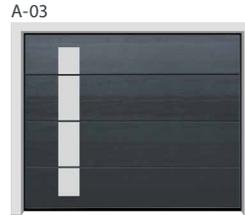
RAL painted decor elements & windows



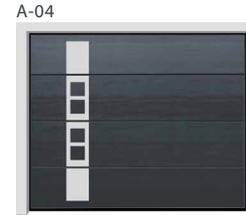
A-01



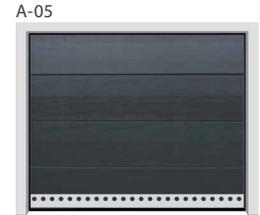
A-02



A-03



A-04



A-05



A-06



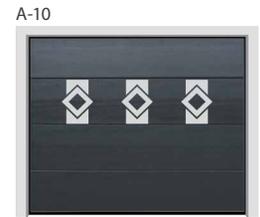
A-07



A-08



A-09



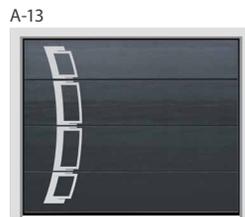
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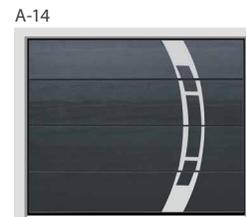
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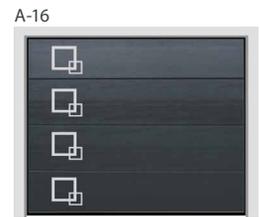
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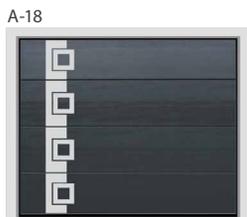
A-13



A-14



A-16



A-18



A-20



A-28



AW-01



AW-02



AW-07



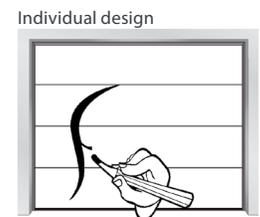
AW-13



AW-14

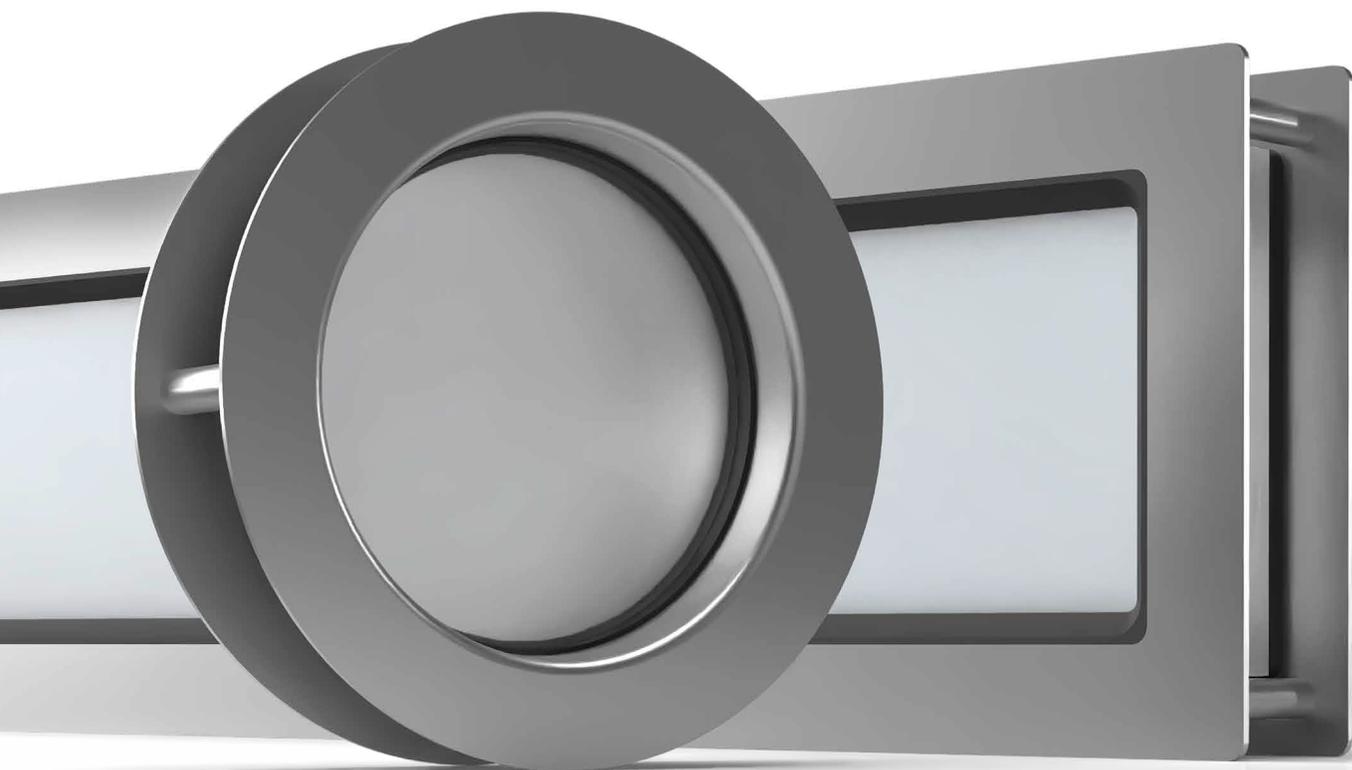


AW-15



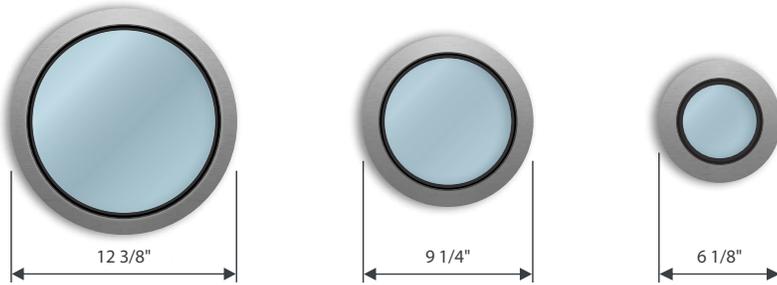
Individual design

WINDOWS



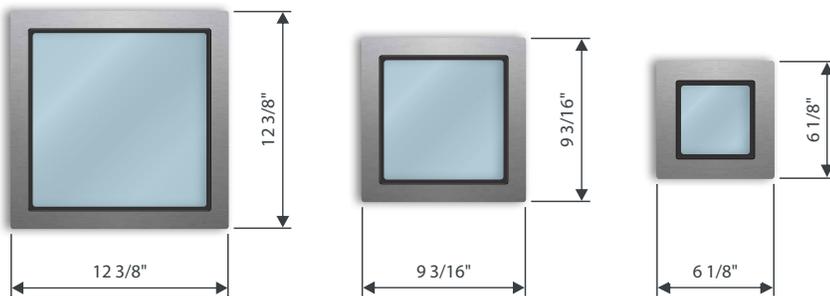
ROUND STAINLESS STEEL WINDOWS (single glazing safety glass)

Painted RAL colors



SQUARE STAINLESS STEEL WINDOWS (double glazing safety glass)

Painted RAL colors



RECTANGULAR STAINLESS STEEL WINDOWS (double glazing safety glass)

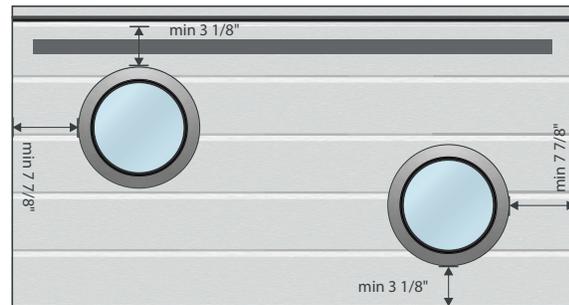
Painted RAL colors



STAINLESS STEEL WINDOWS LOCATION



$W \leq 177 \frac{3}{16}$ "



$177 \frac{3}{16}$ " > $W \geq 236 \frac{1}{4}$ "

TYPE OF GLASS



Clear (glass)



Matt (glass)



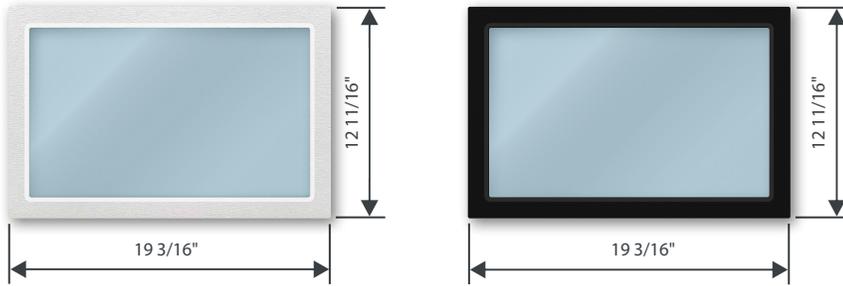
Frosted (glass)



Tinted (glass) (gray or brown)

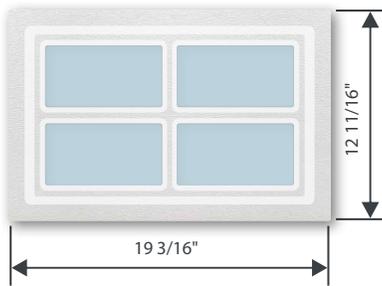
STANDARD ACRYLIC DOUBLE GLAZING WINDOWS (standard frame - white/black)

Painted RAL colors



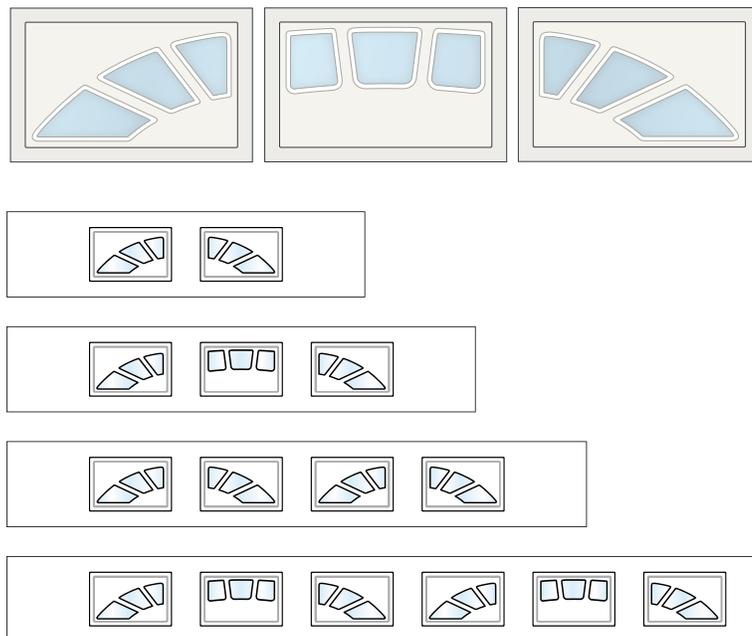
"CROSS" ACRYLIC DOUBLE GLAZING WINDOWS (standard frame - white)

Painted RAL colors

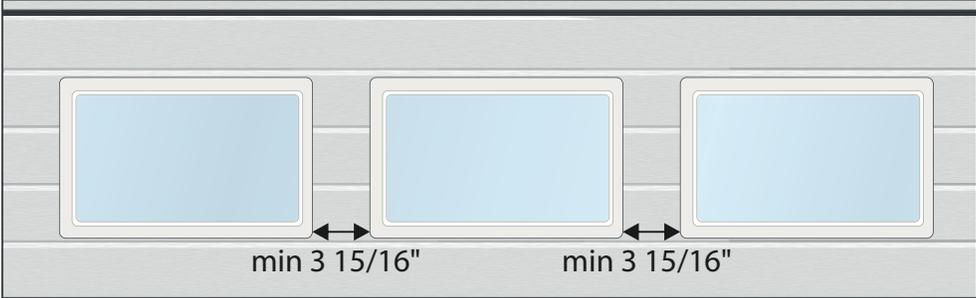


"SUNRISE" ACRYLIC DOUBLE GLAZING WINDOWS (standard frame - white)

Painted RAL colors



ACRYLIC DOUBLE GLAZING WINDOWS LOCATION



TYPE OF GLASS



Clear (acrylic)



Matt (acrylic)



Frosted (acrylic)

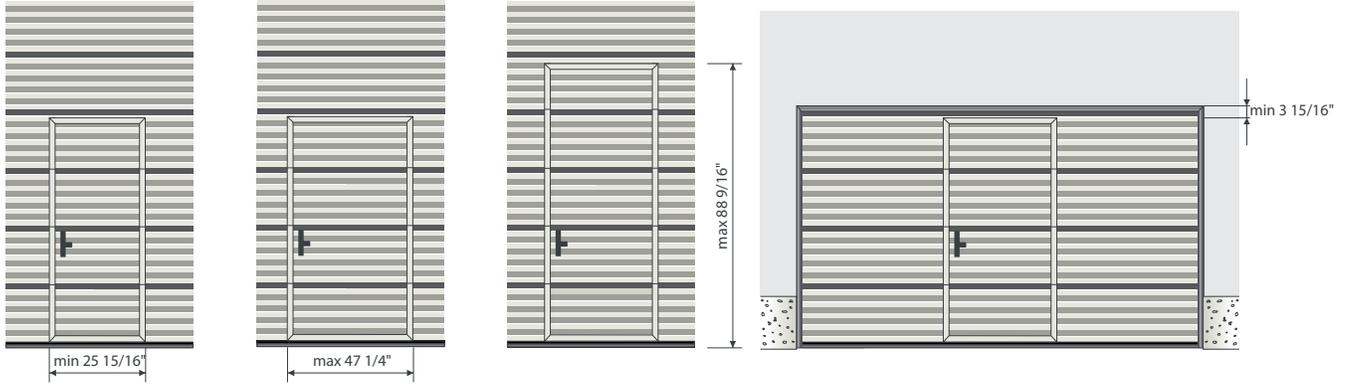


Tinted (acrylic) (gray or brown)

WICKET DOORS

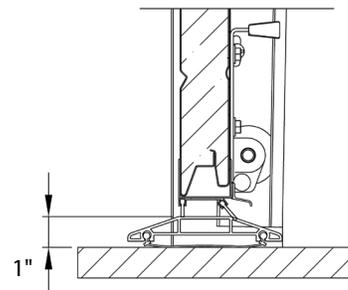
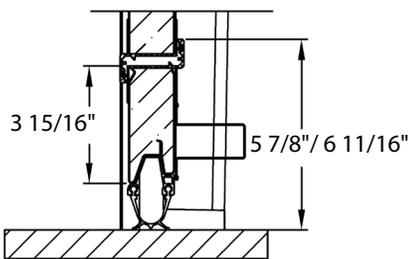


WICKET DOOR CRITICAL DIMENSIONS



WICKET DOOR WITH STANDARD THRESHOLD

WICKET DOOR WITH LOW THRESHOLD



HANDLE OPTIONS



Black handle
22050

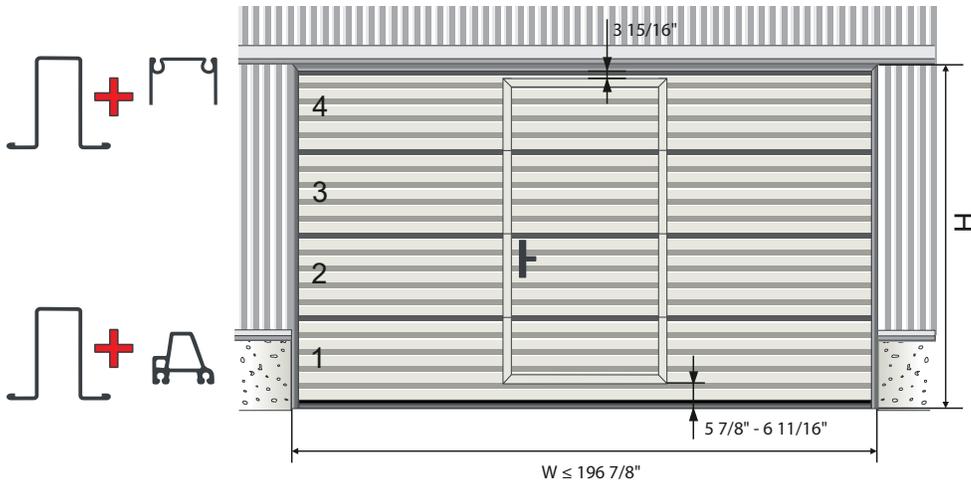
White handle
22050

Silver handle
22050

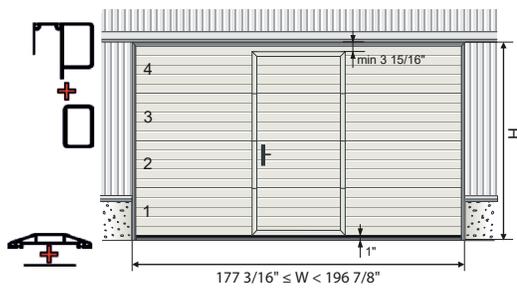
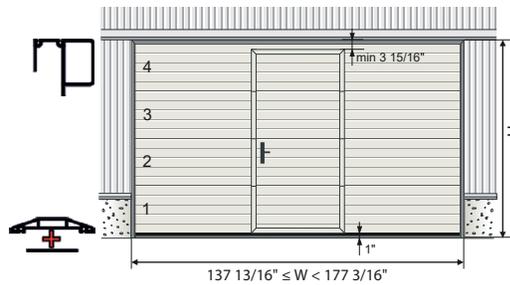
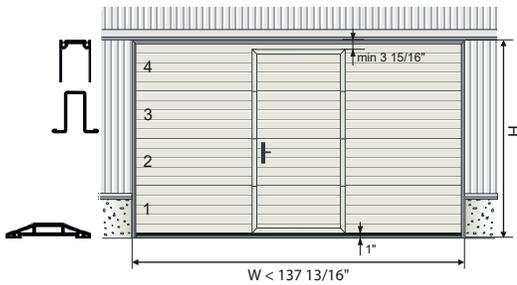
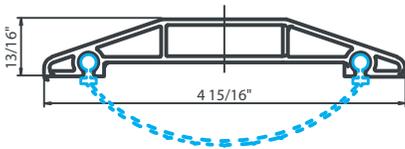
Fixed knob
(optional)
22046

Black handle - on wood image and painted doors.
White handle - on white doors.
Silver handle - on silver doors and by request.

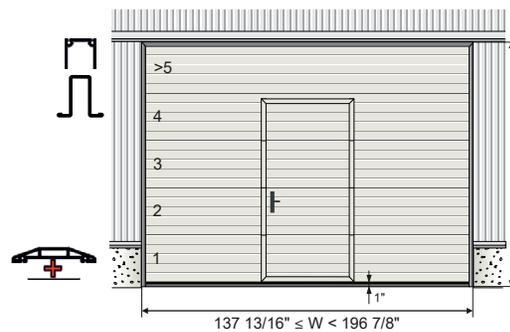
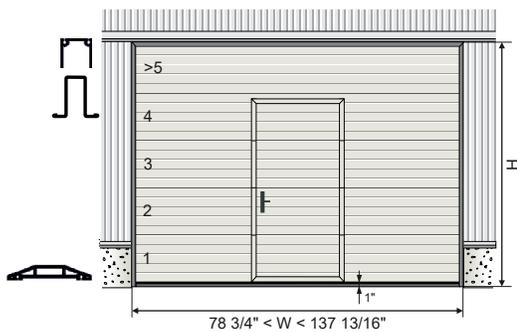
STANDARD THRESHOLD



LOW THRESHOLD



W > 196 7/8" - on request.

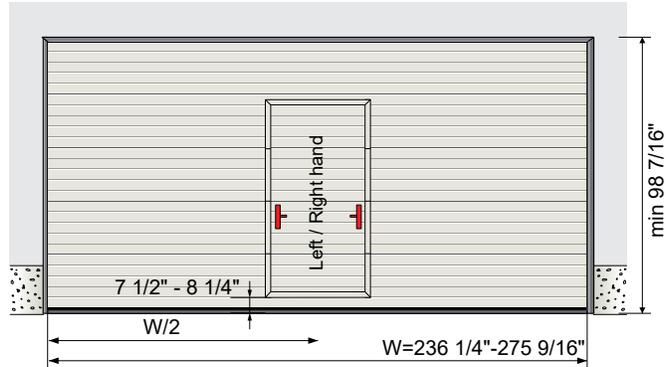
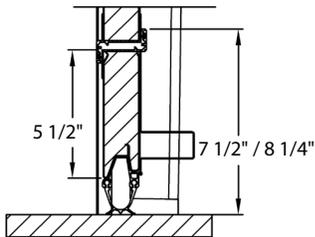


EXTERNAL VIEW

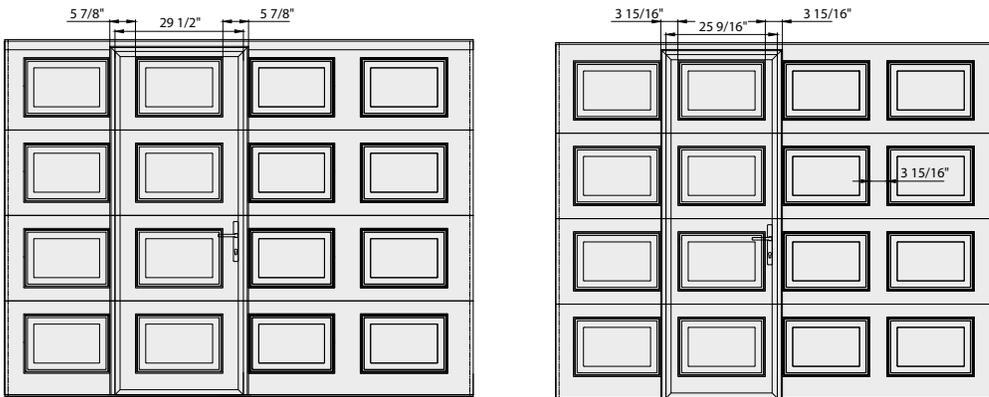


Handle side (L/R) may be chosen when the wicket door is centred.

Wicket door with higher threshold.



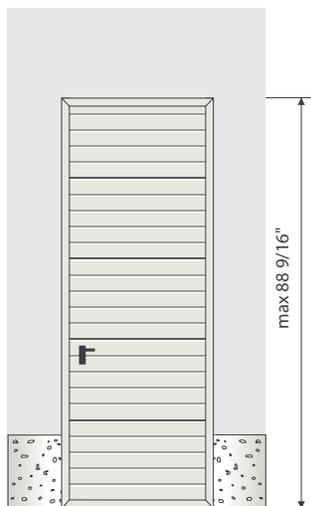
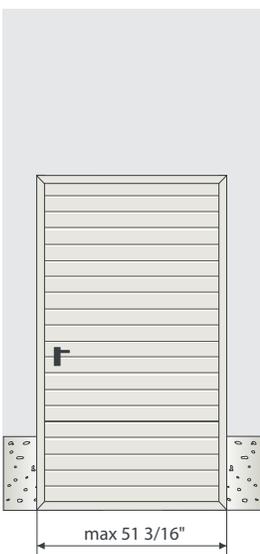
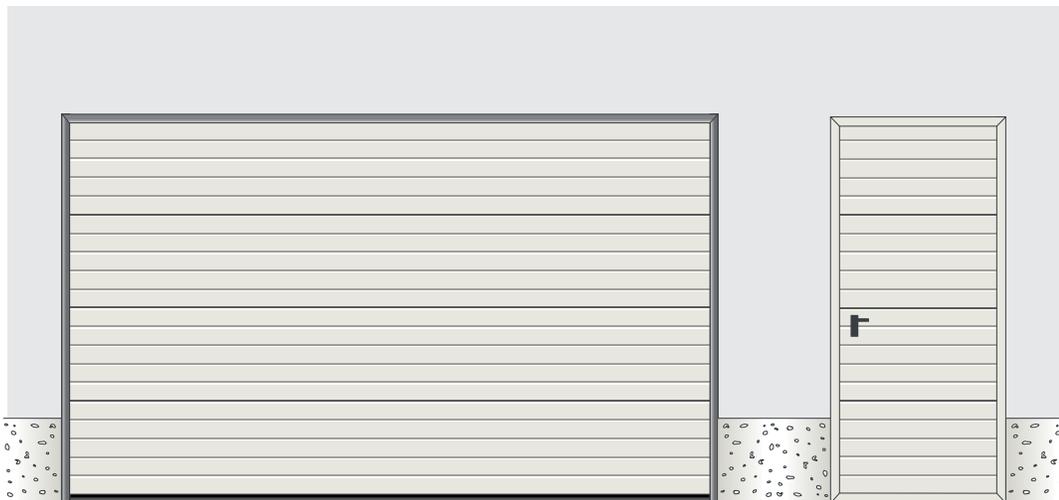
GEORGIAN (CASSETTE) PANELS



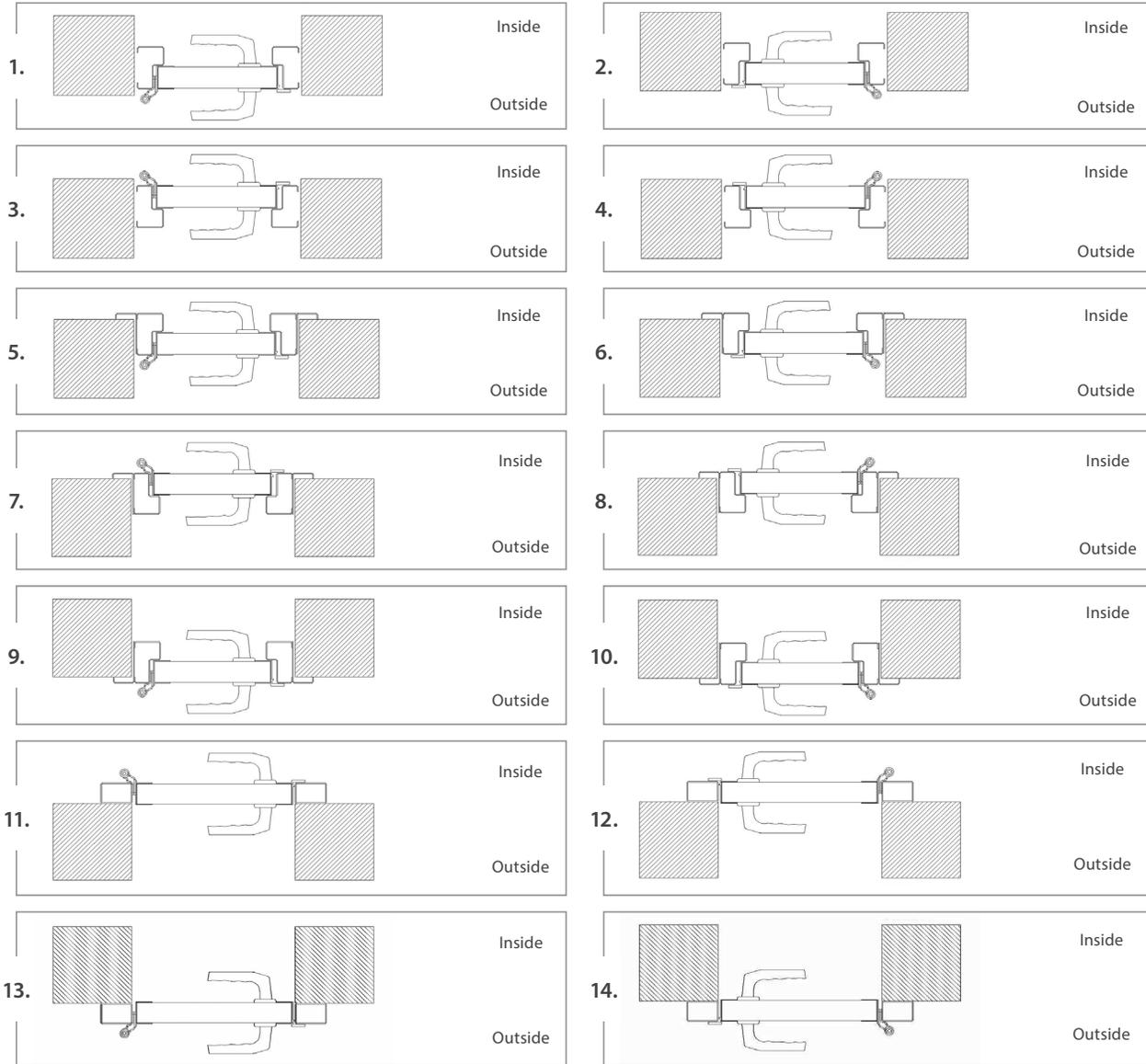
For doors with Georgian (Cassette) panels and wicket door consult manufacturer.

SIDE HINGED DOORS



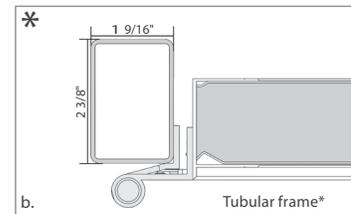
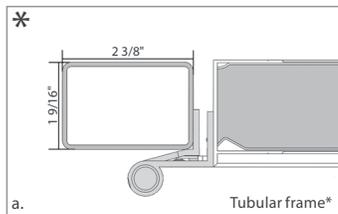
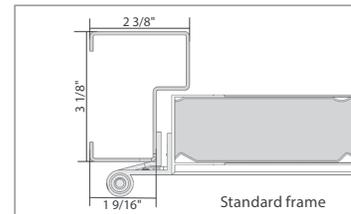
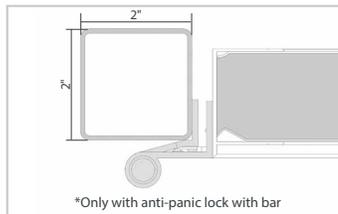
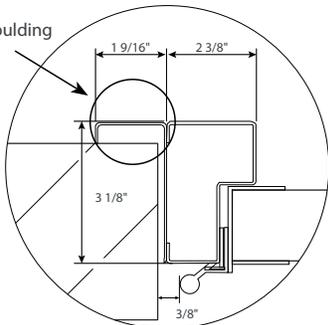


SIDE DOORS FITTING AND OPENING OPTIONS



Frame dimensions

Optional frame moulding

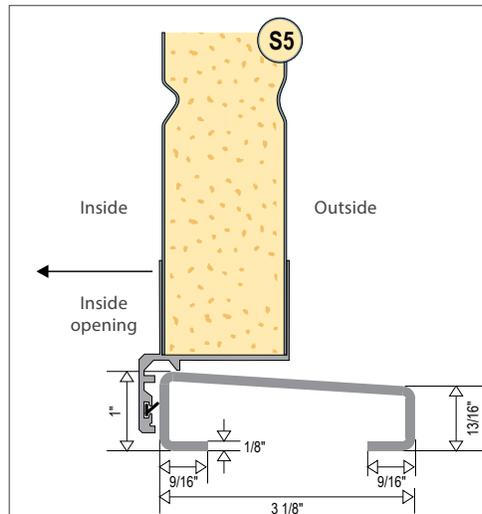
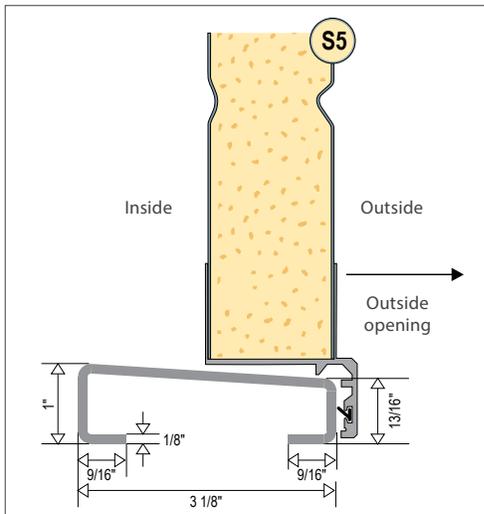
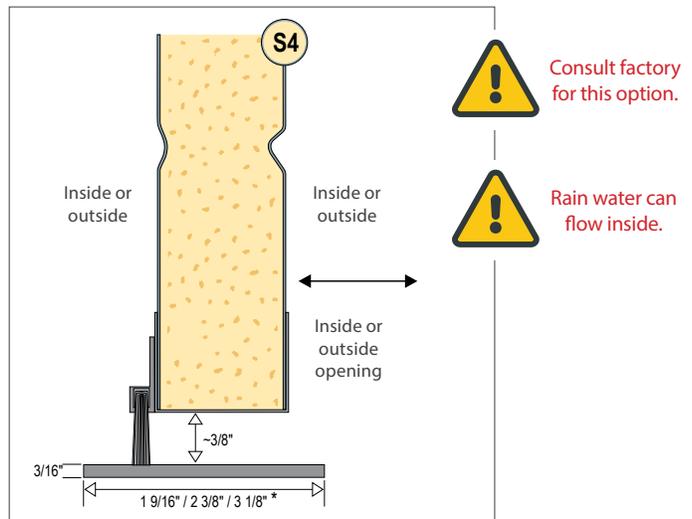
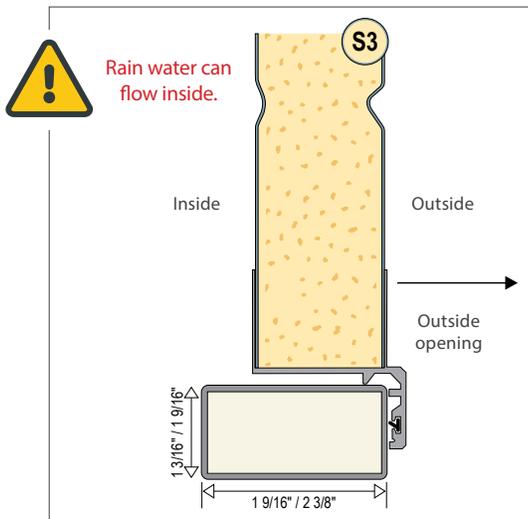
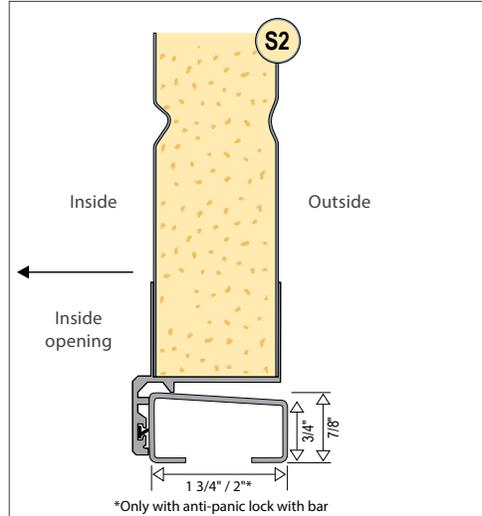
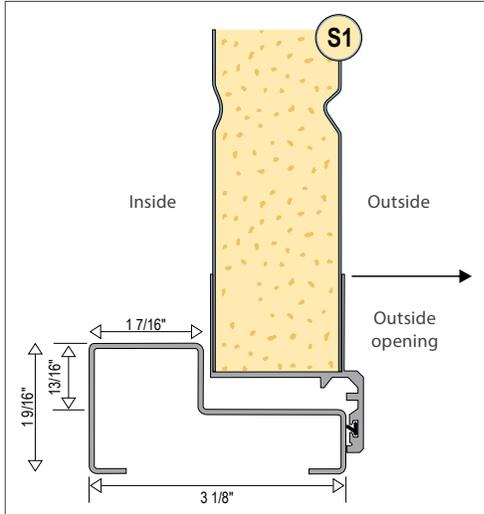


*With threshold S5 side door frame from tube $3\frac{1}{8}'' \times 1\frac{9}{16}''$.



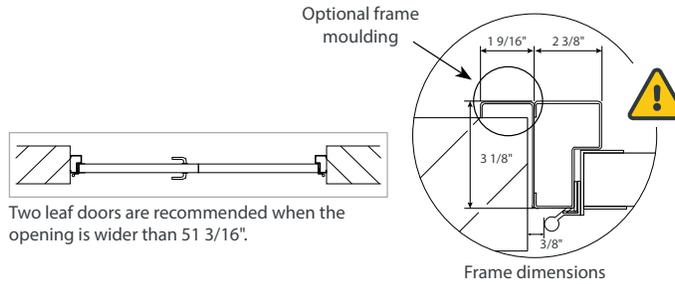
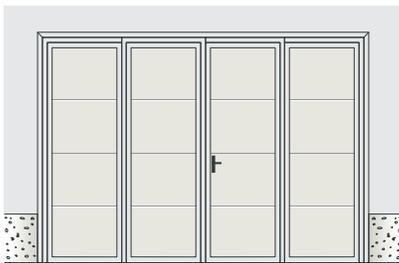
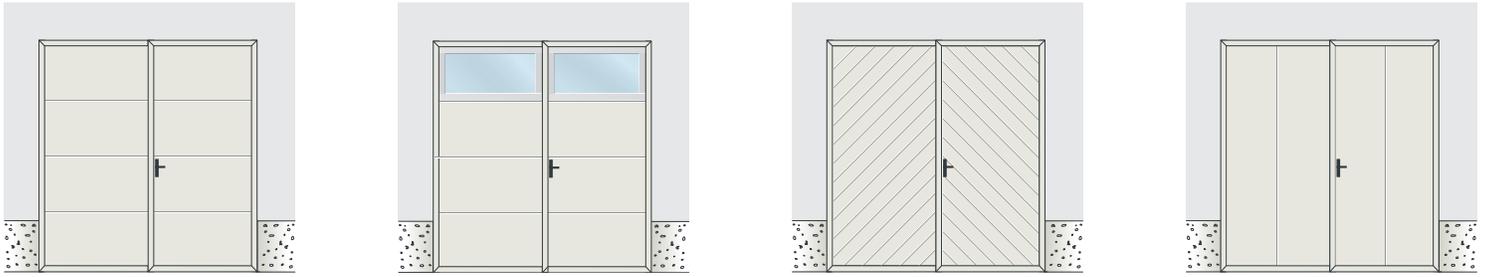
Tolerance of $\frac{3}{8}''$ in width and height will be deducted from structural opening sizes given.

SIDE DOORS THRESHOLD TYPES



*Depends on door frame option

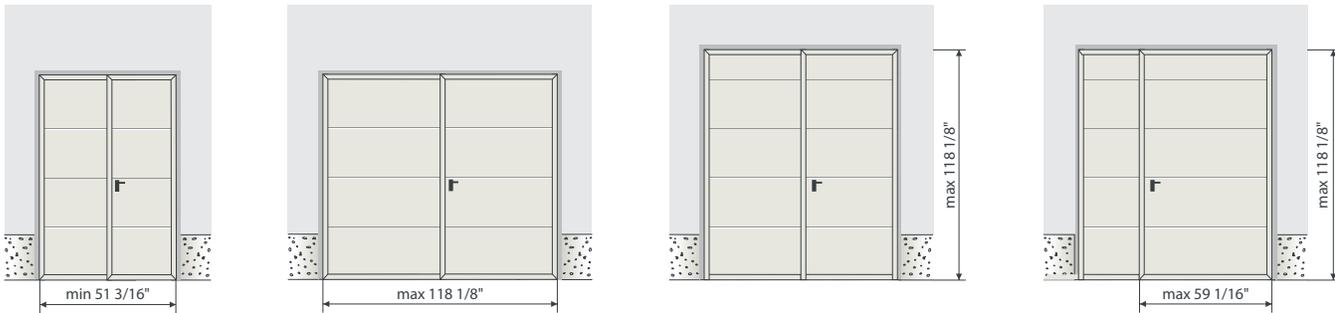
All dimensions are given in inches (in).



Tolerance of 3/8" in width and height will be deducted from structural opening sizes given.

Two leaf doors are recommended when the opening is wider than 51 3/16".

DOUBLE SIDE DOOR CRITICAL DIMENSIONS



STANDARD HANDLES



Black handle
22050



White handle
22050



Silver handle
22050

Black handle - on wood image and painted doors.
White handle - on white doors.
Silver handle - on silver doors and by request.

OPTIONAL HANDLES



Fixed knob
22046



Stainless steel
HLS 02



Stainless steel
HLS 03



Stainless steel
HLS 04



Stainless steel
HLS 05



Stainless steel
HLS 06



Stainless steel
HLS 12



Stainless steel
anti-panic handles
(Only with full lock 22035)



Chrome plated
ASSA Modular 565



H90R
Ø 1 3/16" 90°

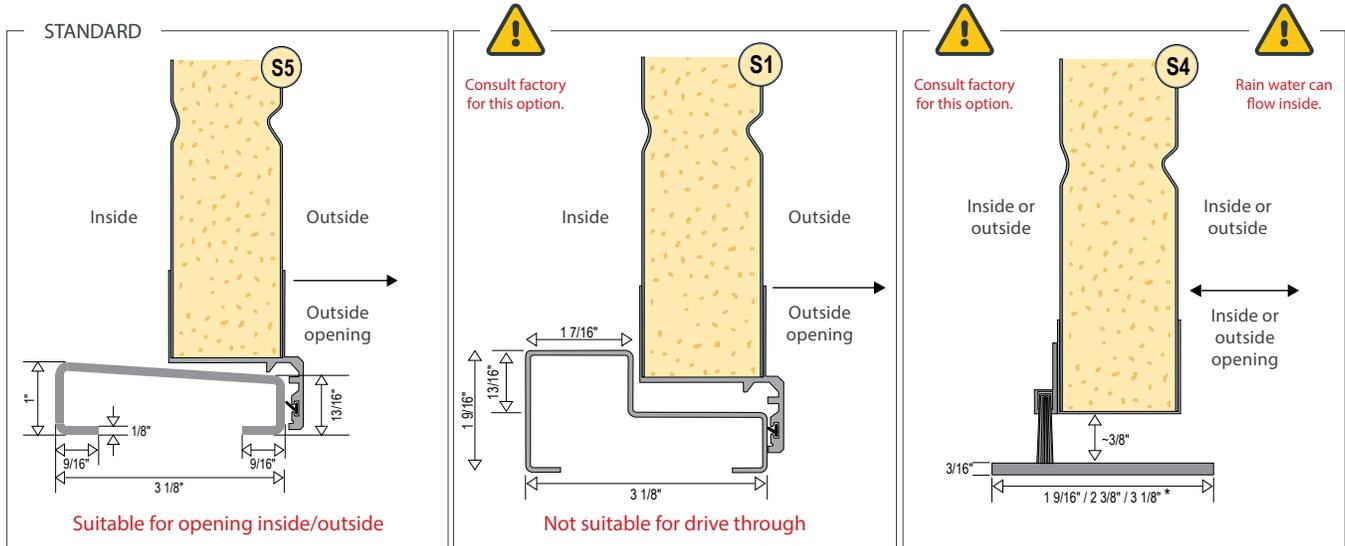
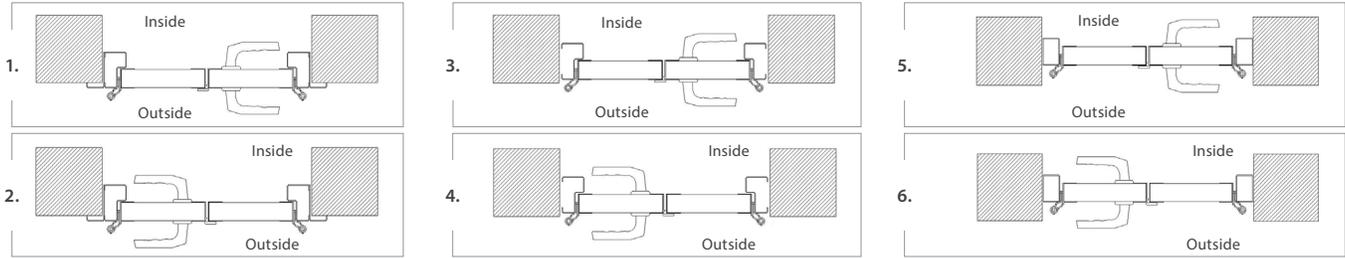
H90R-500
H90R-800
H90R-1200
H90R-1400
H90R-1600
H90R-1800



H90S
1 3/16"x13/16" 90°

H90S-500
H90S-800
H90S-1200
H90S-1400
H90S-1600
H90S-1800

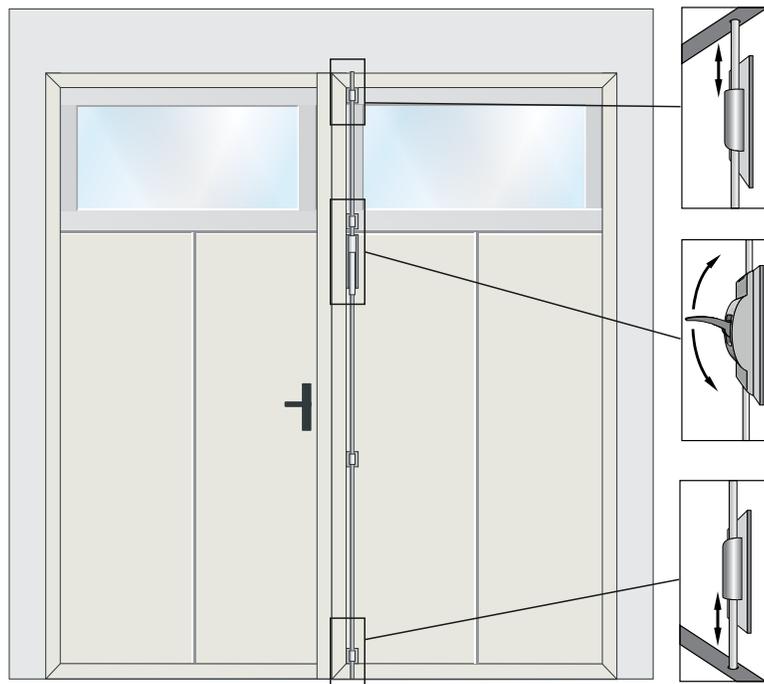
SH2 OPENING AND HANDLING OPTIONS



*Depends on door frame option

LOCKING OPTIONS AND DOOR STAYS

Espagnolette lock (optional).



Door stays (pr. Door leaf 27 9/16" <. Opening 90° / 110° (optional).



Locking of the fixed door leaf. Top / bottom (standard).



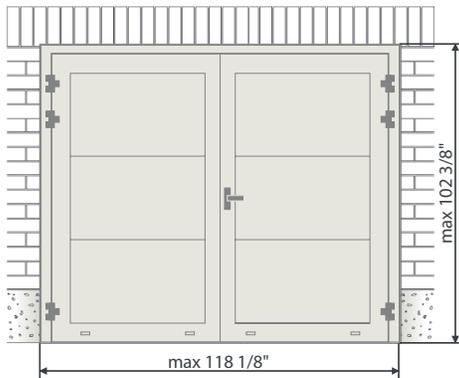
Shoot bolt for leaf fixation (optional).



SH2 THERMO



SH2T P – with 1 9/16" slick design panel filling



Standard colors



Painted RAL colors & Slick Plus panels

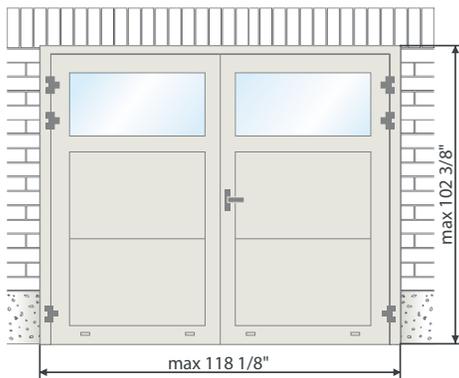


- Door frame size up to: 118 1/8"x102 3/8"
- Hinges and handle (standard colors: white, black, silver)
- 1-point lock
- Integrated shoot bolts
- Door stays.

Door model SH2T P filling inside, Stucco embossed RAL 9002.

Opens only to the outside.
Not suitable for drive through.

SH2T P+FV – with 1 9/16" slick design panel filling + FV panel



Standard colors



Painted RAL colors & Slick Plus panels

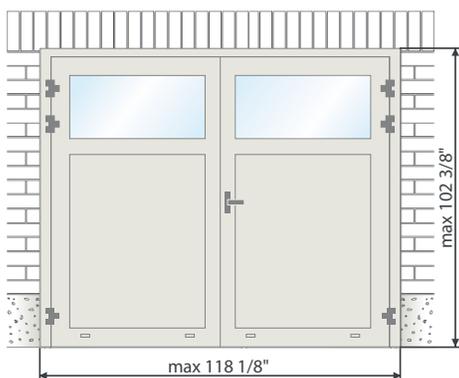


- Door frame size up to: 118 1/8"x102 3/8"
- Double clear safety glazing / matt (max height 20 1/2")
- Hinges and handle (standard colors: white, black, silver)
- 1-point lock
- Integrated shoot bolts
- Door stays.

Door model SH2T P+FV filling inside, Stucco embossed RAL 9002.

Opens only to the outside.
Not suitable for drive through.

SH2T S+FV – with 1 9/16" aluminum sandwich filling + FV panel



Standard colors



Painted RAL colors & Slick Plus panels



- Door frame size up to: 118 1/8"x102 3/8"
- Double clear safety glazing / matt (max height 20 1/2")
- Hinges and handle (standard colors: white, black, silver)
- 1-point lock
- Integrated shoot bolts
- Door stays.

Door model SH2T S+FV sandwich filling inside Smooth, same as door color.

Opens only to the outside.
Not suitable for drive through.

OPTIONS



Integrated espagnolette



"Stabilus" gas door stays



Hinges
(standard colors:
white, black, silver)
K80105448



Double clear safety
glazing / matt



Handle
(standard colors:
white, black, silver)
K19241108



Escutcheon
(standard colors:
white, black, silver)
K19241138



Door stays
22061



Integrated
shoot bolts
K80009618

MORE OPTIONS



Custom sand blasted
glazing



Custom color hinges and handle



Fixed knob
with escutcheon
(colors: black, white, silver)

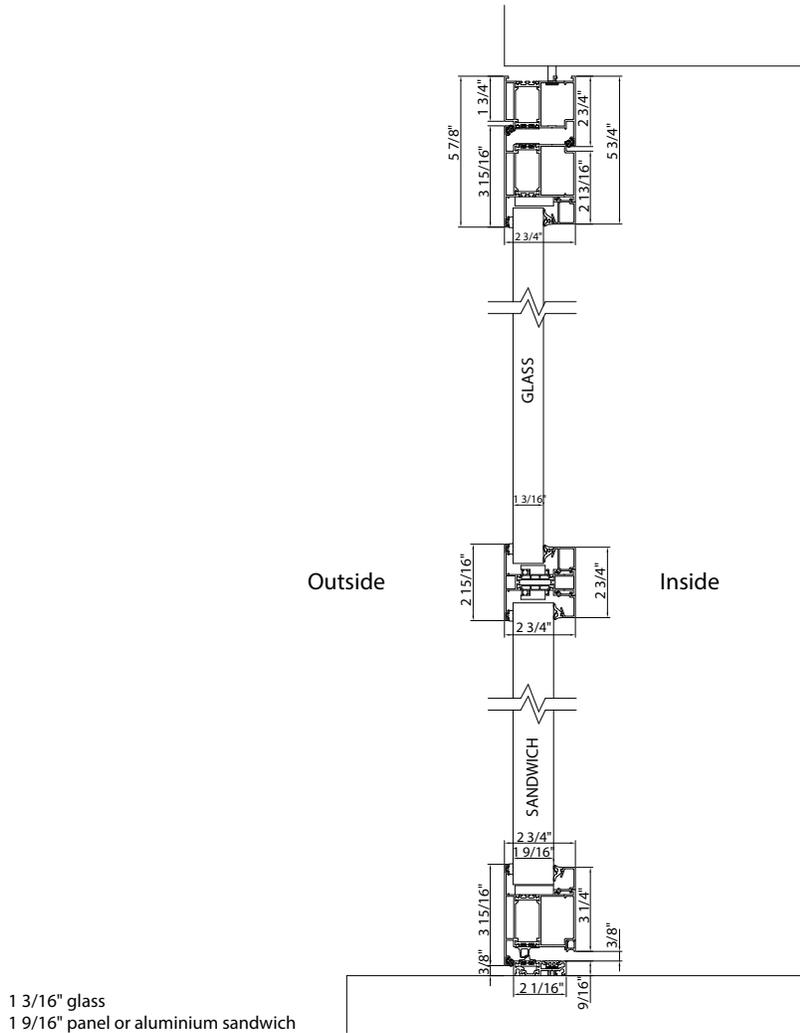


3-point lock for door frame
94 1/8" – 102 3/8" height
(handle min 47 1/4" from floor)

3-point lock for door frame
81 1/8" – 94" height
(integrated espagnolette included)
(handle min 41 3/8" from floor)

Look for prices in the
**GARAGE & INDUSTRIAL DOORS
PRICELIST**

FRAME PROFILE CROSS-CUT VIEW



1 3/16" glass
1 9/16" panel or aluminium sandwich

